

OIPE

Does Not Comply Corrected Diskette Needed

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/092,900

DATE: 11/01/2002

TIME: 12:24:29

Input Set : N:\EBONY'S\EP.txt

Output Set: N:\CRF4\11012002\J092900.raw

See also pp. 85,86,

87 fr other enroy

```
1 <110> APPLICANT: Padigaru, Muralidhara
              Spytek, Kimberly A.
      2
      3
              Shenoy, Suresh G.
      4
              Taupier Jr., Raymond J.
      5
              Pena, Carol E.A.
      6
              Li, Li
      7
              Zerhusen, Bryan D.
      8
              Gusev, Vladimir Y.
      9
              Ji, Weizhen
     10
              Gorman, Linda
              Miller, Charles E.
     11
              Kekuda, Ramesh
     12
     13
              Patturajan, Meera
              Gangolli, Esha A.
     14
              Vernet, Corine A.M.
     15
     16
              Guo, Xiaojia Sasha
     17
              Tchernev,, Velizar T.
              Fernandes, Elma R.
     18
              Casman, Stacie J.
     19
              Malyankar, Uriel M.
     20
     21
              Gerlach, Valerie
              Liu, Yi
     22
     23
              Anderson, David W.
     24
              Spaderna, Steven K.
     25
              Catterton, Elina
     26
              Leite, Mario W.
              Zhong, Haihong
     27
     28
              Alsobrook, John P.
     29
              Lepley, Denise M.
     30
              Rieger, Daniel K.
              Burgess, Catherine E.
W--> 31
     33 <120> TITLE OF INVENTION: Novel Proteins and Nucleic Acids Encoding Same
     35 <130> FILE REFERENCE: 21402-290C
C--> 37 <140> CURRENT APPLICATION NUMBER: US/10/092,900
     38 <141> CURRENT FILING DATE: 2002-03-07
     40 <150> PRIOR APPLICATION NUMBER: USSN 60/274,322
     41 <151> PRIOR FILING DATE: 2001-03-08
     43 <150> PRIOR APPLICATION NUMBER: USSN 60/283,675
     44 <151> PRIOR FILING DATE: 2001-04-13
     46 <150> PRIOR APPLICATION NUMBER: USSN 60/338,092
     47 <151> PRIOR FILING DATE: 2001-12-03
     49 <150> PRIOR APPLICATION NUMBER: USSN 60/274,281
```

50 <151> PRIOR FILING DATE: 2001-03-08

RAW SEQUENCE LISTING

DATE: 11/01/2002 TIME: 12:24:29

PATENT APPLICATION: US/10/092,900

Input Set : N:\EBONY'S\EP.txt

Output Set: N:\CRF4\11012002\J092900.raw

- 199 <150> PRIOR APPLICATION NUMBER: USSN 60/279,344 200 <151> PRIOR FILING DATE: 2001-03-28 202 <150> PRIOR APPLICATION NUMBER: USSN 60/332,271 203 <151> PRIOR FILING DATE: 2001-11-14
- 205 <150> PRIOR APPLICATION NUMBER: USSN 60/291,099
- 206 <151> PRIOR FILING DATE: 2001-05-16
- 208 <150> PRIOR APPLICATION NUMBER: USSN 60/291,190
- W--> 209 <151> PRIOR FILING DATE: 2001-5-15
 - 211 <150> PRIOR APPLICATION NUMBER: USSN 60/280,233
 - 212 <151> PRIOR FILING DATE: 2001-03-30
 - 214 <150> PRIOR APPLICATION NUMBER: USSN 60/280,802
 - 215 <151> PRIOR FILING DATE: 2001-04-02
 - 217 <150> PRIOR APPLICATION NUMBER: USSN 60/335,301
 - 218 <151> PRIOR FILING DATE: 2001-10-31
 - 220 <150> PRIOR APPLICATION NUMBER: USSN 60/337,185
 - 221 <151> PRIOR FILING DATE: 2001-12-04
 - 223 <150> PRIOR APPLICATION NUMBER: USSN 60/345,705
 - 224 <151> PRIOR FILING DATE: 2002-01-03
 - 226 <160> NUMBER OF SEQ ID NOS: 768

ERRORED SEQUENCES

- 3915 <210> SEQ ID NO: 38
- 3916 <211> LENGTH: 1221
- 3917 <212> TYPE: PRT
- 3918 <213> ORGANISM: Homo sapiens
- 3920 <400> SEQUENCE: 38
- 3921 Met Phe Ser Gly Thr Leu Gly Lys Asn Met Lys Thr Gln Pro Pro Leu
- 3924 Ser Arg Met Asn Arg Glu Glu Leu Glu Asp Ser Phe Phe Arg Leu Arg 25 3925 20
- 3927 Glu Asp His Met Leu Val Lys Glu Leu Ser Trp Lys Gln Gln Asp Glu
- 40 35 3930 Ile Lys Arg Leu Arg Thr Thr Leu Leu Arg Leu Thr Ala Ala Gly Arg
- 60 55 50
- 3933 Asp Leu Arg Val Ala Glu Glu Ala Ala Pro Leu Ser Glu Thr Ala Arg 75 70
- 3936 Arg Gly Gln Lys Ala Gly Trp Arg Gln Arg Leu Ser Met His Gln Arg
- 3937 90
- 3939 Pro Gln Met His Arg Leu Gln Gly His Phe His Cys Val Gly Pro Ala 105 100
- 3942 Ser Pro Arg Arg Ala Gln Pro Arg Val Gln Val Gly His Arg Gln Leu
- 120
- 3945 His Thr Ala Gly Ala Pro Val Pro Glu Lys Pro Lys Arg Gly Arg Asp 135
- 130 3948 Arg Leu Ser Tyr Thr Ala Pro Pro Ser Phe Lys Glu His Ala Thr Asn
- 155 150 3949 145
- 3951 Glu Asn Arg Gly Glu Val Ala Ser Lys Pro Ser Glu Leu Ala His Ile

RAW SEQUENCE LISTING

DATE: 11/01/2002

PATENT APPLICATION: US/10/092,900

TIME: 12:24:29

Input Set : N:\EBONY'S\EP.txt

Output Set: N:\CRF4\11012002\J092900.raw

	4099						950					955					960
	4101	Ile	Leu	Asn	Gly	Asn	Thr	Leu	Lys	Gln	Val	Asn	Tyr	Thr	Glu	${\tt Trp}$	Lys
	4102					965					970					975	
	4104	Phe	Ser	Glu	Thr	Asn	Ser	Phe	Ile	Gly	Asp	Gly	Phe	Lys	Asn	Gln	His
	1105				0.80					985					aan		
	4107	31u	Glu	Glu	Glu	Met	Thr	Leu	Ser	His	Ser	Ala	Leu	Lys	Gln	Lys	the Seguence Living the Seguence Living
E>	4108			995					1000					1005			are bequerice Listing Please shock and
_ ,	4110	Pro	T.em	His	Pro	Va1	Asn	Asp	Lvs	Glu	Ser	Ser	Glu	Gln	Glv	Ser	sequences for similar errors.
E>		. 10	010		110	·	11011	1015	-15	0			020		1		,
E/	4113													Tle	Val	Pro	Pro Ilua di Yanne
F\	4114		DCI	Olu	212.4	0111	1030		p	001		1035			,		1040
F>	4116																Glu
E>		MEL	Ser	GIII	цуз	045	FIO	цуз	ALU	пор	050		בינם	1100	Cyb	055	Missing tran smile
E>	4119	т1.	370]	Con	T 011		Dho	m	Dro	Clu			Wa l	Mot	Sar		' 1.
		rre	Val	ser	060	АТа	rne	TYL	FIU	065	Ата	GIU	Val	Mec	070	пор	wirmpen will
E>		·	т1.	T		37.5.1	Merro	37 - 1	C1.,		T ***	Dho	Фттх	λan		Dro	
	4122	ASII	rre	_	GIII	Val	TAT	Val			гуу	Pne	TAT		ьеu	PIO	Leu
E>		~	a1	075	a 1	m1	D	17 7	080		7	T a	Dwo	085	715	C1	C1 11
	4125	ser		Thr	GIU	Thr	Pro		ser	Leu	Arg	гуя		Arg	Ата	GIY	Giu
E>			090		-1	•	-1	095			-1.		100	3	D	a 1	a1
	4128			His	Phe	His		Ser	Lys	Val	тте		Leu	Asp	Pro	GIn	
E>	4129				_	_	110	_,	_	_,	_	115	_	_	a 1	a1 .	120
	4131	Gln	Gln	GTA	Arg							Met	Leu	Asn	GTĀ		Asp
E>						125									_	135	_
•	4134	Pro	Asp		-		Leu	Lys				Val	Ser	Asp		Leu	Asp
E>					140					145					150		
	4137	Glu		_	_	Glu	Cys	Glu	Glu	Val	Gly	Tyr	Ala		Leu	Gln	Leu
E>				155					160					165			
	4140	\mathtt{rp}	Gln	Ile	Leu	Glu	Ser	Gly	Arg	Asp	Ile	Leu	Glu	Gln	Glu	Leu	Asp
E>	4141		170					175					180				
	4143	Val	Val	Ser	Pro	Glu	Asp	Leu	Ala	Thr	Pro	Ile	Gly	Arg	Leu	Lys	Val
E>	4144	185					190					195					200
	4146	Ser	Leu	Gln	Ala	Ala	Ala	Val	Leu	His	Ala	Ile	Tyr	Lys	Glu	Met	Thr
E>	4147					205					210					215	
	4149	Glu	Asp	Leu	Phe	Ser											
E>	4150				220												
	8708	<210)> SF	EQ II	ON C	: 76											
	8709	<211	L> LF	ENGTI	H: 25	545											
	8710 -	<212	2> TY	PE:	PRT												
	8711 -						o sap	piens	5								
	8713 -																
	8714						Leu	Lys	Ile	Cys	Val	Arg	His	Cys	Asn	Val	Val
	8715	1				5					10					15	
	8717	Lys	Thr	Met	Gln	Phe	Glu	Pro	Ser	Thr	Ala	Val	Tyr	Asp	Ala	Cys	Arg
	8718	_			20					25			-		30		
	8720	Val	Ile	Arq	Glu	Arq	Val	Pro	Glu	Ala	Gln	Thr	Gly	Gln	Ala	Ser	Asp
	8721			35					40				-	45			
	8723	Tyr	Glv		Phe	Leu	Ser	Asp		Asp	Pro	Ara	Lys	Gly	Ile	Trp	Leu
	0724		1							- 1		ر -	-	-		-	

55

8726 Glu Ala Gly Arg Thr Leu Asp Tyr Tyr Met Leu Arg Asn Gly Asp Ile

Input Set : N:\EBONY'S\EP.txt

	8874		850					855					860				
	8876	Ala	Ala	Lys	Leu	Leu	Ala	Asp	Ser	Thr	Ala	Arg	Met	Val	Glu	Ala	Ala
	8877						870					875					880
	8879	Lys	Gly	Ala	Ala	Ala	Asn	${\tt Pro}$	Glu	Asn	Glu	Asp	Gln	Gln	Gln	Arg	Leu
	8880					885					890					895	
	8882	Arg	Glu	Ala	Ala	Glu	Gly	Leu	Arg		Ala	Thr	Asn	Ala	Ala	Ala	Gln
	8883				900					905					910		
	8885	Asn	Ala	Ile	Lys	Lys	Lys	Ile		Asn	Arg	Leu	Glu		Ala	Ala	Lys
	8886			915					920			_	_	925	_		_
	8888	Gln		Ala	Ala	Ala	Ala		Gln	Thr	Ile	Ala		Ser	Gln	Asn	Ala
	8889		930					935	_	_		_	940				_
	8891			Ser	Asn	Lys		Pro	Ala	Ala	Gln		Gln	Leu	Va⊥	GIn	
	8892				1		950			_	a 1	955		a 1		1	960
	8894	Cys	Lys	Ala	Val		Asp	Hls	тте	Pro		Leu	vaı	GIn	GTĀ		Arg
	8895	a 1	a	a1	. 1 -	965	. 1 -	a 1	3	T	970	33-	a 1	T	21-	975	т1.
	8897	GIY	ser	GIn		Gin	Ala	GIU	Asp		ser	Ата	GIN	Leu		Leu	TTE
	8898 8900	т1.	Com	Con	980	N a n	Dho	T 011	Cln	985	C1**	Cor	Trra	Mot	990	Cor	Cor
E>		тте	ser	995	GIII	ASII	Pile	Leu	000	PIO	СТА	Set	гЛЯ	005	val	ser	ser
E/	8903	λla	T.vc		λla	Va 1	Dro	Thr		Sor	Δen	Gln	Δla		Δla	Met	Gln
E>		пта	010	Ата	AIG	V CL I	110	015	VUI	DCI	изъ	GIII	020	ALU	ALU	ricc	OIII
n/	8906	Len		Gln	Cvs	Ala	Lvs		Len	Ala	Thr	Ser		Ala	Glu	Leu	Ara
E>			001	01	010	1114	030	11011				035	200		014		040
_ ,	8909		Ala	Ser	Gln	Lvs		His	Glu	Ala	Cys		Pro	Met	Glu	Ile	
E>						045					050	1				055	
	8912	Ser	Ala	Leu	Asn	Thr	Val	Gln	Thr	Leu	Lys	Asn	Glu	Leu	Gln	Asp	Ala
E>					060					065	-				070	_	
	8915	Lys	Met	Ala	Ala	Val	Glu	Ser	Gln	Leu	Lys	Pro	Leu	Pro	Gly	Glu	Thr
E>	8916			075					080					085			
	8918	Leu	Glu	Lys	Cys	Ala	Gln	Asp	Leu	Gly	Ser	Thr	Ser	Lys	Ala	Val	Gly
E>	8919		090					095					100				
	8921	Ser	Ser	Met	Ala	Gln	Leu	Leu	Thr	Cys	Ala	Ala	Gln	Gly	Asn	Glu	His
E>							110					115					120
	8924	Tyr	Thr	Gly	Val		Ala	Arg	Glu	Thr		Gln	Ala	Leu	Lys		Leu
E>						125	_			_	130	_				135	_
	8927	Ala	Gln	Ala		Arg	Gly	Val	Ala		Ser	Thr	Thr	Asp		Ala	Ala
E>			 .		140	_	_	_		145				a 1	150	~	. 1 -
	8930	Ala	His		Met	Leu	Asp	ser		Arg	Asp	vaı	мет		GLY	ser	Ala
E>		14 - ±	T	155	a1	01	71-	T	160	31-	T	T1.	21-	165	a 1	1 ~~	31.
	8933	met		TTE	GIN	GIU	Ата		GIN	Ата	ьeu	тте		PIO	СТУ	ASP	Ala
E>		Clu	170	Cln	Cln	λνα	T 011	175	Cln	Val	λla	Tvc	180	Wa 1	Cor	иіс	Sor
E>	8936		AIG	GIII	GIII	Arg	190	АІа	GIII	Val	нта	195	Ата	val	ser	птэ	200
E/	8939		λan	λen	Cvc	Val		Cvc	Lan	Dro	Glv		Luc	λen	Val	Man	
E>		цeu	A3II	USII	Cys	205	ប១!!	Cys	Leu	110	210	0111	шуз	лэр	vu.	215	7 UL JL
E>	8942	Δla	T.eu	Lvc	Ser		Glv	Glu	Ser	Ser		Lve	Len	Leu	Va 1		Ser
E>		ALU	Leu	ביים	220	110	U-1	Jru	JUL	225	-10	-13	Lu	Lou	230		501
	8945	Leu	Pro	Pro		Thr	Lvs	Pro	Phe		Glu	Ala	Gln	Ser		Leu	Asn
E>				235			-1-		240					245			
	••																

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/092,900
DATE: 11/01/2002
TIME: 12:24:29

Input Set : N:\EBONY'S\EP.txt

E>	0160				120					425					430		
E/	9170 I	37C (ln v			Δla	Ser	Thr	Δla		Len	Len	Va l	Ala		Lvs	Val
	9170 L 9171	iys (135	ara .	AIU	DCI		440	0111	Lou			445	-1-	_1 -	
F/	9173 I	37C 7			ln	Δen	Ser			Met	Ara	Άrσ	Leu		Ala	Ala	Glv
Б.			450	rap (3 1 11	MDP	JCI	455			5	5	460				1
E>	9174 9176 A			7=1 1	[.37.C	λνα	Δla		Agn	Asn	Leu	Val	_	Ala	Ala	Gln	Lvs
	9170 A		AIG	var 1	цуз		470	501	пор	11011	Lou	475	5				480
E>	9177 A	100	۱ - ۱	oho (71 77			A en	Δen	Δsn	Asn		Va 1	Va l	Glu		
-		та и	AIG I	riie (485	ALU	пър	пор	1125	490	,				495	-1-
E>	9180 9182 F	nha 1	7-1 (77., (λla	Gln	Tla	Tla		Δla	Gln	Glu	Glu		Leu
		'ne '	val (500	TIE	нта	GIII	116	505	AIU	niu	0111	OIU	510		
E>	9183 9185 I					Clu	Lou	Clu	Glu		Δrσ	T.vg	T.v.s	Len		G1n	Tle
		ıys ı			AIG	GIU	ьеu	Gru	520	AIG	ALG	шуз	цуз	525	232.4	0111	110
E>	9186 9188 A			515	al n	Пттъ	Tvc	Dho		Dro	Thr	Glu	T.@11		Glu	Asp	Glu
		_		TII (3111	тут	плэ	535	пеп	FIU	1111	Olu	540	1119	OLU	ш	O_Lu
E>	9189		530					233					740				
	9191																
E>	9192 5		0 > 01	50 TI	n N	. ວາ											
	10097																
	10098																
	10099							nior									
	10100						0 50	ibrei	15								
	10102 10103						. 1 1-	. T 01	ייריים ו	n The	r Spi	r Val	Dhe	T.e.1	1 T1e	Glv	Leu
				тгр	ASP	5 THE		т пес	1 111	, 111.	10		. 1110	шес	LLC	15	
	10104 10106	1		mbr	T OU			. λls	λαι	. Cv	_		ı Glr	n Thr	Ser		
		ьец	PIO	TIIT	20		PIIC	: AIC	LASI	1 Cy.		LUCC	. 011		30		1110
	10107 10109	Wot	Orra	mh r			C13	, λνο	T 177523			n Pro	Pro	o Glr			Leu
	101109	мес	Cys	35		ALG	GI	, TI	4 (J ()11		, , ,	45		, , ,	200
	10110	Cvc	Tou			. I.au	Val	Hic			ı Aro	r Pro	a Ala			Lvs	Val
		Cys	50	261	FIC	, пес	, vas	55		.1 110	2 2111	,	6(1-	
	10113 10115	Wa 1		λla	T.611	G1v	λer			i Th	r Phe	- Glr			Glv	Ala	Glv
	10115	65	Ата	, AIG	пец	. Сту	70		, 01.			75			1		80
	10118	Cln	LAU	Sor	Glu	Dro			n Arc	r Gli	n Tri			Pro	Glr	Ala	Cvs
	10119	GIII	пси	DCI	Oic	85			,	, 01.	9(95	-
	10113	T.011	Dro	Glv	Va1			s G11	ı Mei	r Gli	_	-	l Val	LGl	7 Glu	Arq	Thr
	10121	пси	110	011	100					10				-	110		
	10124	Pro	Ser	Ara			Sei	r Lei	ı Ar			a Glu	ı Ala	a Lei	ı Val	Pro	Ala
	10125	110	DCI	115					120		J	, -		125			
	10127	Δla	Glv			Ser	Lei	1 Cvs			n Ası	o Ile	e Phe	e Ile	e Ser	Leu	Leu
	10127												140				
	10130														e Asr	Leu	Glu
	10131			110		, ,,,,,,,	150					155					160
	10133			Tro	Lvs	Leu			r Lei	u Ph	e Il	e Gly	/ Vai	l Ası	n Asp	Leu	Cys
	10133	-15			-, -	165					17		•		-	175	
	10134	Hic	Tvr	Cvs	Pro			L Gli	a Gl	y Pr			e Ası	o Lei	ı Gly		
	10137	****	- 1 -	0,5	180					18			1	•	190		
	10137	Asn	Thr	Len			Lei	ı Glı	ı Lei			a Ala	a Phe	e Val			Val
	10133	5P	- 114	195					20					205			
	10142	Glu	Val			Lei	ı Ala	a Sei			r Gl	n Gl	/ Gli			y Lys	Cys
										4		-	-	-		-	-

Input Set : N:\EBONY'S\EP.txt

E>	10290			995					000					005			
	10292	Gln	Asn	Glu	Pro	Phe	Leu	Arg	Thr	Pro	Arq	Asn	Ser	Asn	Tyr	Thr	Tyr
E>	10293		010					015			_		020		-		-
	10295	Pro	Ile	Lys	Pro	Ala	Ile	Glu	Asn	Trp	Gly	Ser	Asp	Phe	Leu	Cys	\mathtt{Thr}
E>	10296			-			030			_	-	035					040
	10298	Glu	Trp	Lys	Ala	Ser	Asn	Ser	Val	Pro	Thr	Ser	Val	His	Gln	Leu	Arg
E>	10299					045					050					055	
	10301	Pro	Ala	Asp	Ile	Lys	Val	Val	Ala	Ala	Leu	Gly	Asp	Ser	Leu	Thr	Thr
E>	10302				060					065					070		
	10304	Ala	Val	Gly	Ala	Arg	Pro	Asn	Asn	Ser	Ser	Asp	Leu	Pro	Thr	Ser	\mathtt{Trp}
E>	10305			075					080					085			
	10307	Arg	Gly	Leu	Ser	Trp	Ser	Ile	Gly	Gly	Asp	Gly	Asn	Leu	Glu	Thr	His
E>	10308		090					095					100				
	10310	Thr	Thr	Leu	Pro	Ser	Ile	Leu	Lys	Lys	Phe	Asn	Pro	Tyr	Leu	Leu	Gly
E>	10311	105					110		•			115					120
	10313	Phe	Ser	Thr	Ser	Thr	Trp	Glu	Gly	Thr	Ala	Gly	Leu	Asn	Val	Ala	Ala
E>	10314					125					130					135	
	10316	Glu	Gly	Ala	Arg	Ala	Arg	Arg	Asp	Met	Pro	Ala	Gln	Ala	\mathtt{Trp}	Asp	Leu
E>	10317				140					145					150		
	10319	Val	Glu	_	Met	Lys	Asn	Ser		Ile	His	Phe	Gln		Asp	Trp	Lys
E>	10320			155	_				160	_	_	_	_	165	_,	_	_
	10322	He		Thr	Leu	Phe	He	_	GLY	Asn	Asp	Leu	_	Asp	Phe	Cys	Asn
E>	10323	_	170		- 1	-1	_	175	- 1		-1	a1 .	180	- 1 -		-	-1
	10325	_	Leu	vaı	GIY	GLu	_	vaı	GIn	HlS	тте		GIn	Ата	Leu	Asp	
E>	10326		Com	<i>c</i> 1	C1	T 011	190	7 ~~~	7 J n	Dho	17-1	195	w- 1	17-1	C1	17.5 1	200 Mot
ъ .	10328	Leu	ser	GIU	GIU	205	PIO	Arg	Ата	Pile	210	ASII	Val	val	GIU	215	Met
E>	10329 10331	Clu	T 011	λla	cor		mazze	Cln	C117	Cln		Clv	Lvc	Cvc	λ1 =		LOU
F>	10331	GIU	Leu	на	220	пеп	тут	GIII	СТУ	225	СТУ	GTĀ	пÃЭ	Cys	230	Mec	пец
E>	10332	Δla	Δla	Gln		Δen	Cvc	Thr	Cvs		Δra	ніс	Ser	Gln		Ser	T.e.u
E>	10335	711u	mu	235	21011	21511	CID		240	пси	**** 9	*****	001	245	001	001	LCu
_ ,	10333	Glu	Lvs		Glu	Len	Lvs	Lvs		Asn	Trp	Asn	Leu		His	Glv	Tle
E>	10338	014	250				~10	255					260	~		U-1	
	10340	Ser		Phe	Ser	Tvr	grT		Gln	Tvr	Thr	Gln		Glu	Asp	Phe	Ala
E>	10341					_	270			_		275	,		-		280
	10343	Val	Val	Val	Gln	Pro	Phe	Phe	Gln	Asn	Thr	Leu	Thr	Pro	Leu	Asn	Arg
E>	10344					285					290					295	_
	10346	Gly	Asp	Thr	Asp	Leu	Thr	Phe	Phe	Ser	Glu	Asp	Cys	Phe	His	Phe	Ser
E>	10347	_			300					305					310		
	10349	Asp	Arg	Gly	His	Ala	Glu	Met	Ala	Ile	Ala	Leu	Trp	Asn	Asn	Met	Leu
E>	10350			315					320					325			
	10352	Glu	Pro	Val	Gly	Arg	Lys	Thr	Thr	Ser	Asn	Asn	Phe	Thr	His	Ser	Arg
E>	10353		330					335					340				
	10355		Lys	Leu	Lys	Cys		Ser	Pro	Val	Ser		\mathtt{Tyr}	Leu	\mathtt{Tyr}	Thr	Leu
E>	10356						350					355					360
	10358	Arg	Asn	Ser	Arg		Leu	Pro	Asp	Gln		Glu	Glu	Ala	Pro	Glu	Val
E>	10359				_	365					370					375	_
	10361	Leu	Tyr	\mathtt{Trp}		Val	Pro	Val	Ala		Gly	Val	Gly	Leu		Val	Gly
E>	10362				380					385					390		

Input Set : N:\EBONY'S\EP.txt

E>	10364 10365	Ile	Ile	Gly 395	Thr	Val	Val	Trp	Arg 400	Cys	Arg	Arg	Gly	Gly 405	Arg	Arg	Glu
	10367	Asp	Pro	Pro	Met	Ser	Leu	Arg	Thr	Val	Ala	Leu					
E>	10368		410					415									
	10962	<210)> SI	EQ II	ои с	86											
	10963	<21.	L> LI	ENGT	H: 14	123											
	10964																
	10965						sap	piens	3								
	10967																
	10968		Gly	Leu	Arg		Gly	Ile	Phe	Leu		Glu	Leu	Leu	Leu		Leu
	10969	1				- 5			•		10	_	_	_	_	15	_
	10971	Gly	Gln	Gly		Pro	Gln	Ile	His		Ser	Pro	Arg	Lys		Thr	Leu
	10972		~ 3	~1	_ 20	_	_	a 1	1	25		_	_	_	30	_	_
	10974	Glu	GIÀ		ьeu	Trp	Pro	GIU		vaı	HIS	ser	Leu		Pro	ser	Asp
	10975	т1.	T	35	1701	71.	7 1 a	т1.	40	2	т	a1	T1.	45	Dma	7 ~~	Dma
	10977	тте	ьуs 50	Pne	Val	Ата	Ата	55	GTÀ	ASII	Leu	GIU	60 11e	Val	PIO	ASP	PIO
	10978 10980	C1.		C1 77	7 an	Lon	Clu		Cln	7 an	Clu	7 20		Cln	Cln	1721	Cvc
	10981	65	1111	СТУ	кър	пеп	70	цуъ	GIII	тэр	GIU	75	FIO	GIII	GIII	Val	80
	10983		G1v	Va 1	Met	Thr		T.em	Ser	Agn	Tle		Δra	Фvr	Phe	Ser	
	10984	ricc	011	Vul	ricc	85	· u i	DCu.	DCI	nop.	90	110	1119	- 7 -	1 110	95	110
	10986	Ser	Val	Pro	Met		Val	Cvs	His	Thr		Lvs	Ara	Val	Ile	-	His
	10987				100			-1-		105	1	1	5		110		
	10989	Asp	Gly	Ala	Glu	Asp	Leu	Trp	Ile	Gln	Ala	Gln	Glu	Leu	Val	Arq	Asn
	10990	•	-	115		-		-	120					125			
	10992	Met	Lys	Glu	Asn	Gln	Leu	Asp	Phe	Gln	Phe	Asp	Trp	Lys	Leu	Ile	Asn
	10993		130					135					140				
	10995	Val	Phe	Phe	Ser	Asn	Ala	Ser	${\tt Gln}$	Cys	Tyr	Leu	Cys	Pro	Ser	Ala	Gln
	10996	145					150					155					160
	10998	Gln	Asn	Gly	Leu	Ala	Ala	Gly	Gly	Val	Asp	Glu	Leu	Met	Gly	Val	Leu
	10999					165					170					175	
	11001	Asp	Tyr	Leu		Gln	Glu	Val	Pro		Ala	Phe	Val	Asn		Val	Asp
	11002	_	_		180		1		_	185	~ 3	_	•	a 1	190		_
	11004	Leu	Ser		Val	Ala	GLu	Val		Arg	GIn	Tyr	His		Thr	Trp	Leu
	11005	0	D	195	D===	a 1	D	O	200	C	Com	a 1	~1	205	m1	7	т о
	11007 11008	ser	210	Ата	Pro	GIU	Pro	215	ASII	Cys	ser	GIU	220	THE	THE	Arg	Leu
	11008	Δla		Val	Val	Mαt	Cln		Sar	Тиг	Gln	Glu		mrn	λen	Sar	T.Q11
	11010		цуз	vai	Vai	Mec	230	тър	261	тут	GIII	235	Ата	тър	ASII	261	240
	11013		Δla	Ser	Ser	Arα		Ser	Glu	Gln	Glu		Phe	Thr	Va1	Va l	
	11014	LCu	2114	001	DCI	245	- 1 -	DCI	O_Lu	0111	250	001	1 110	****	, u _	255	1110
	11016	Gln	Pro	Phe	Phe		Glu	Thr	Thr	Pro		Asp	Pro	Ara	Leu		Asp
	11017				260	-1-				265				5	270		
	11019	Ser	Thr	Thr	Leu	Ala	Trp	His	Leu		Asn	Arg	Met	Met	Glu	Pro	Ala
	11020			275			-		280	-		_		285			
	11022	Gly	Glu	Lys	Asp	Glu	Pro	Leu		Val	Lys	His	Gly	Arg	Pro	Met	Lys
	11023	_	290		-			295					300	-			
	11025	Cys	Pro	Ser	Gln	Glu	Ser	Pro	Tyr	Leu	Phe	Ser	Tyr	Arg	Asn	Ser	Asn
	11026						310					315					320

Input Set : N:\EBONY'S\EP.txt

	11175		Thr	His	Thr	Thr	Leu 110	Pro	Asp	Ile	Leu	Lys 115	Lys	Phe	Asn	Pro	Tyr 120
E>	11176 11178	Leu	Leu	Gly	Phe	Ser		Ser	Thr	Trp			Thr	Ala	Gly		
E>	11179					125					130					135	_
	11181	Val	Ala	Ala	Glu						Asp	Met	Pro	Ala		Ala	Trp
E>	11182				140					145	_		_	1	150	_	0 1
	11184	Asp	Leu	Val	Glu	Arg	Met	Lys		Ser	Pro	Gln	Asp		Asn	Leu	GIU
E>	11185			155			_		160			~ 1	1	165		T	C-+-
	11187	Lys	Asp	Trp	Lys	Leu	Val		Leu	Phe	He	GIY		Asn	Asp	ьeu	Cys ·
E>	11188		170				_	175	1	a 3		** - 1	180	TT 2	T1_	01 n	Cln.
	11190		\mathtt{Tyr}	Cys	Glu	Asn		Val	GLY	Glu	Tyr		GIN	HIS	rre	GIII	
E>	11191	185			_ •	_	190	~1	a 1	.	D	195	210	Dha	17a 1	7 an	200
	11193	Ala	Leu	Asp	IIe		ser	GLu	GIU	ьeu		Arg	Ald	Pne	Val	215	Val
E>	11194			1		205		21-	a	т	210	71 5	C1**	Cln	C1**		Luc
	11196	Val	Glu	Val		GLu	Leu	Ата	ser	Leu	Tyr	GIII	GTĀ	GIII	230	СТА	ьуѕ
E>	11197	_			220		- 7 -	a1	1	225	G	mh~	Crra	Tou		Uic	cor
	11199	Cys	Ala		Leu	Ата	Ата	GIn		ASII	Cys	THE	Cys	245	Arg	птэ	261
E>	11200	~ 3	~	235	T	a 1	T	01 5	240	T 011	T ***	Tvc	Wa 1		Trn	λen	Τ.Δ11
	11202	GIn		ser	Leu	GIU	Lys	255	GIU	ьeu	гуу	гуз	260	ASII	тър	ASII	пси
E>	11203 11205	01 -	250	C1	т1.	Cor	Cor		cor	Ттт	Trn	Иic		Tur	Thr	Gln	Ara
			HIS	GIY	116	ser	270	PHE	261	тут	11P	275	OIII	- 1 -	1111	0111	280
E>	11206 11208	200	7 an	Dho	λl э	17 a 1		Val	Gln	Pro	Phe		Gln	Asn	Thr	Leu	
п \	11208	GIU	ASP	Pne	АТа	285	Val	Vai	OTII	110	290	1110	0111			295	
F>	11211	Dro	Τ.Δ11	Δen	Δra		Asn	Thr	Asp	Len		Phe	Phe	Ser	Glu		Cys
E>	11212	FIO	Беа	ASII	300	011	шър	1111		305					310	_	-
F>	11214	Phe	His	Phe		Asp	Ara	Glv	His		Glu	Met	Ala	Ile	Ala	Leu	Trp
E>	11215			315	552		5	1	320					325			_
	11217	Asn	Asn		Leu	Glu	Pro	Val		Arg	Lys	Thr	Thr	Ser	Asn	Asn	Phe
E>	11218		330					335	_		-		340				
	11220	Thr	His	Ser	Arg	Ala	Lys	Leu	Lys	Cys	Pro	Ser	Pro	Glu	Ser	Pro	Tyr
E>	11221	345					350					355					360
	11223	Leu	Tyr	Thr	Leu	Arg	Asn	Ser	Arg	Leu	Leu	Pro	Asp	Gln	Ala	Glu	Glu
E>	11224					365					370					375	
	11226	Ala	Pro	Glu	Val	Leu	Tyr	${\tt Trp}$	Ala	Val	Pro	Val	Ala	Ala	Gly	Val	Gly
E>	11227				380					385					390		
	11229	Leu	Val	Val	Gly	Ile	Ile	Gly	Thr	Val	Val	Trp	Arg		Arg	Arg	Gly
E>	11230			395					400					405		_	
	11232	Gly	Arg	Arg	Glu	Asp	Pro	Pro	Met	Ser	Leu	Arg		Val	Ala	Leu	
E>	11233							415					420				
	13746)										
	13747					115											
	13748																
	13749						o sa	pien	S								
	13751	<40	0> S	EQUE	NCE:	110	_	_	_	_	_	~ -	3	37- 3	G	т	Т
	13752			Arg	Leu		Leu	Trp	Trp	Lеи			arg	val	cys		ьeu
	13753			_	_	5			*7- T	.	10		37a 7	Dwc	C^~	15	Co~
	13755	Leu	Pro	Pro		Cys	Ala	Leu	val			σтλ	val	PI.O		ser	ser
	13756				20					25					30		

Input Set : N:\EBONY'S\EP.txt

	13905 13906	Met	Arg	Arg	Tyr 820	Asn	Val	Pro	Ala	Thr 825	Pro	Asp	Gly	Val	Glu 830	Tyr	Leu
	13908 13909	Lys	Asn	Asp 835	Pro	Glu	Lys	Leu	Asp 840	Ala	Phe	Ile	Met	Asp 845	Lys	Ala	Leu
	13911 13912	Leu	Asp 850	Tyr	Glu	Val	Ser	Ile 855	Asp	Ala	Asp	Cys	Lys 860	Leu	Leu	Thr	Val
	13914 13915		Lys	Pro	Phe	Ala	Ile 870	Glu	Gly	Tyr	Gly	Ile 875	Gly	Leu	Pro	Pro	Asn 880
	13917 13918		Pro	Leu	Thr	Ala 885	Asn	Ile	Ser	Glu	Leu 890	Ile	Ser	Gln	Tyr	Lys 895	Ser
	13920 13921	His	Gly	Phe	Met 900	Asp	Met	Leu	His	Asp 905	Lys	Trp	Tyr	Arg	Val 910	Val	Pro
	13923 13924	Cys	Gly	Lys 915	Arg	Ser	Phe	Ala	Val 920	Thr	Glu	Thr	Leu	Gln 925	Met	Gly	Ile
	13926 13927	Lys	His 930	Phe	Ser	Gly	Leu	Phe 935	Val	Leu	Leu	Cys	Ile 940	Gly	Phe	Gly	Leu
	13929 13930		Ile	Leu	Thr	Thr	Ile 950	Gly	Glu	His	Ile	Val 955	Tyr	Arg	Leu	Leu	Leu 960
	13932 13933		Arg	Ile	Lys	Asn 965	Lys	Ser	Lys	Leu	Gln 970	Tyr	Trp	Leu	His	Thr 975	Ser
	13935 13936	Gln	Arg	Leu	His 980	Arg	Ala	Ile	Asn	Thr 985	Ser	Phe	Ile	Glu	Glu 990	Lys	Gln
E>	13938 13939	Gln	His	Phe 995	Lys	Thr	Lys	Arg	Val	Glu	Lys	Arg	Ser	Asn 005	Val	Gly	Pro
E>	13941 13942	_	010				-	015					020				
E>	13944 13945	025					030					035					040
E>	13947 13948	_				045					050		_			055	
E>	13950 13951			_	060				_	065					070		
E>	13953 13954			075					080					085			
E>	13956 13957		090					095					Lys 100	Thr	Glu	Leu	Glu
E>	13959 13960	105	-		_		110	Arg	Thr	Cys	Glu	Ser 115					
	15531 15532	<213	L> LI	ENGTI	H: 12		3										
	15533 15534	<213	3> OI	RGAN	ISM:		sa _r	piens	5								
	15536 15537 15538						Pro	Gly	Gly	Gly	Ala 10	Ala	Ala	Val	Met	Met 15	Thr
	15540 15541		Tyr	Asn	Asn 20	Gly	Arg	Cys	Pro	Arg 25		Ser	Leu	Tyr	Ser 30		Cys
	15543 15544	Ile	Ile	Glu 35	Glu	Lys	Thr	Val	Val 40	Leu	Gln	Lys	Lys	Asp 45	Asn	Glu	Gly

Input Set : N:\EBONY'S\EP.txt

	15693 15694	Leu	Glu	Phe 835	Ala	Asn	Ser	Phe	Asp 840	Ile	Pro	Asp	Asp	Arg 845	Ala	Ala	Ser
	15696 15697	Va1	Pro 850	Ala	Leu	Ser	Asp	Leu 855	Val	Lys	Gln	Lys	Lys 860	Ser	Asp	Thr	Pro
	15699 15700			Pro	Ser	Leu	Asn 870		Ser	Gln	Pro	Thr 875	Asn	Ser	Ala	Asp	Ser 880
	15702		Lys	Pro	Ala	Ser 885		Ser	Asn	Cys	Leu 890		Ala	Ser	Phe	Leu 895	
•	15703 15705	Pro	Pro	Glu			Asp	Ala	Val			Ser	Gly	Ile	Glu 910		Val
	15706 15708	Asp	Ser		900 Ser	Ser	Ser	Asp		905 His	Leu	Glu	Thr			Thr	Ile
	15709 15711	Ser		915 Va l	Ser	Ser	Ile		920 Thr	Leu	Ser	Ser		925 Gly	Gly	Glu	Asn
	15712 15714		930 Asp	Thr	Cys	Thr		935 Tyr	Ala	Asp	Gly		940 Ala	Phe	Met	Val	
	15715 15717	945 Lys	Pro	Pro	Val	Pro	950 Pro	Lys	Pro	Lys		955 Lys	Pro	Ile	Ile		960 Lys
	15718 15720	Ser	Asn	Ala	Leu	965 Tyr	Gln	Asp	Ala	Leu	970 Val	Glu	Glu	Asp		975 Asp	Ser
	15721 15723	Phe	Val	Ile	980 Pro	Pro	Pro	Ala	Pro	985 Pro	Pro	Pro	Pro	Gly	990 Ser	Ala	Gln
E>	15724 15726	Pro	Gly	995 Met	Ala	Lys	Val	Leu	000 Gln	Pro	Arg	Thr	Ser	005 Lys	Leu	Trp	Gly
E>	15727 15729		010					015					020				
E>	15730 15732	025					030					035					040
E>	15733 15735					045					050					055	
E>	15736 15738				060					065					070		
E>	15739 15741			075					080					085			
E>	15742		090					095					100				
E>	15744 15745	105					110					115					120
E>	15747 15748	_				125					130					135	
E>	15750 15751				140					145					150		
E>	15753 15754			155					160					165			
E>	15756 15757	Asp	Leu 170	Phe	Gly	Leu	Asn	Pro 175	Ala	Gly	Arg	Ser	Arg 180	Ser	Pro	Ser	Pro
	15759 15760		Ile	Leu	Gln	Gln	Pro 190	Ile	Ser	Asn	Lys	Pro 195	Phe	Thr	Thr	Lys	Pro 200
	15762 15763	Val	His	Leu	Trp	Thr 205		Pro	Asp	Val	Ala 210		Trp	Leu	Glu	Ser 215	Leu
P/	15765	Asn	Leu	Gly	Glu		Lys	Glu	Ala	Phe		Asp	Asn	Glu	Ile		Gly

Input Set : N:\EBONY'S\EP.txt

										225					230		
E>	15766	_	•	_	220	•	.	a 1	T	225	7 ~~	T 0.11	т1 о	7 an		C1**	Val
	15768	Ser	Hls		Pro	Asn	Leu	GIN		GIU	ASP	ьец	TTE		ьец	дту	Val
E>	15769	_,	_	235	a 1	** : =	3	14 m. d.	240	т1.	<i>α</i> 1	7 22	ת 1 ת	245	Tvc	Cln	LOU
	15771	Thr	_	vaı	GTĀ	HIS	Arg		ASII	ше	GIU	Arg		neu	гуъ	GIII	цец
E>	15772	_	250	_				255					260				
	15774		Asp	Arg													
E>	15775					010											
	25337						5										
	25338					198											
	25339																
	25340) sap	rens	ò								
	25342	<400)> SE	EQUE!	VCE:	218	G	T 0.11	Com	0	T 011	т1о	Dho	Cor	Cvc	LOU	Thr
	25343		vaı	Leu	Leu		Cys	Leu	ser	Cys		116	PHE	ser	Cys	15	1111
	25344		~	m	T	5	T1_	III 2020	a1	T *** G	10	mb x	7 cn	Cor	Tvc		Tla
	25346	Pne	ser	Trp		гăг	ire	ттр	СТУ	ьуs 25	Met	TIIT	АБР	261	30 30	FIO	116
	25347	 1	-	a	20	a	a 1	710	7 ~ ~		т10	Dro	Cor	Cln	_	Dro	Dho
	25349	Thr	Lys		гуѕ	ser	GIU	Ата	40	ьец	TIE	PIO	261	45	GIU	FIO	LIIC
	25350 25352	D	31-	35	7.00	ħ a n	Con	C1**	_	mhr.	Dro	Gln.	λκα		Glv	Glu	Glv
		Pro		ser	ASP	ASII	ser	55	GIU	T 11T	PIO	GIII	60	Lon	Gry	Olu	GLY
	25353 25355	TT 2 -	50	T	Dwo	T	Thr		Cor	Cln	λ1 ລ	Glu		Δla	Ser	ніс	T.vs
			THE	ьeu	PIO	ьуѕ	70	PIO	ser	GIII	Ala	75	FIO	пта	JCI	1115	80
	25356 25358	65	D	T	N an	7 1 n		7 ~~	λκα	λ×α	λen		Τ.Δ11	Dro	Dro	Ser	
		СТУ	PIO	ьуѕ	ASP	85	СТУ	Arg	Ary	Arg	90	DCI	пси	110	110	95	1110
	25359 25361	Cln	Ť 17G	Dro	Bro		λen	Dro	T.011	Ser		Ser	Asp	Ala	Ala		Ser
	25361	GIII	пйр	PIO	100	ALG	A D II	110	пец	105	DCI	DCI	пор		110		00-
	25364	Dro	Glu	T.All		Δla	Δcn	Glv	Thr		Thr	Gln	Glv	Leu		Ala	Thr
	25365	PIO	Giu	115	GIII	AIU	ASII	OT,	120	011		01	011	125			
	25367	λen	Thr		Glv	T.eu	Ser	Ser		Ala	Ara	Pro	Gln		Gln	Gln	Ala
	25368	изр	130	non	O _T	пси	DCL	135	001		5		140	1			
	25370	G1v		Pro	Ser	Lvs	Glu		Lvs	Lvs	Gln	Ala	Asn	Ile	Lvs	Arq	Gln
	25370	-	DCI	110	JCI	ш	150		-1-	-1-		155			1	_	160
	25371		Met	Thr	Asn	Phe		Leu	Glv	Ser	Phe	Asp	Asp	Tyr	Ser	Ser	Asp
	25374	пса	1100			165			1		170	•	-	•		175	_
	25376	Glu	Asp	Ser	Val		Gly	Ser	Ser	Arg	Glu	Ser	Thr	Arg	Lys	Gly	Ser
	25377				180		-			185				-	190		
	25379	Arq	Ala	Ser	Leu	Gly	Ala	Leu	Ser	Leu	Glu	Ala	Tyr	Leu	Thr	Thr	Arg
	25380			195		-			200					205			
	25382	Pro	Ser	Met	Ser	Gly	Leu	His	Leu	Val	Lys	Arg	Gly	Arg	Glu	His	Lys
	25383		210			-		215					220				
	25385	Lys	Leu	Asp	Leu	His	Arg	Asp	Phe	Thr	Val	Ala	Ser	Pro	Ala	Glu	Phe
	25386			_			230					235					240
	25388	Val	Thr	Arg	Phe	Gly	Gly	Asp	Arg	Val	Ile	Glu	Lys	Val	Leu	Ile	Ala
	25389					245					250					255	
	25391	Asn	Asn	Gly	Ile	Ala	Ala	Val	Lys	Cys	Met	Arg	Ser	Ile	Arg	Arg	\mathtt{Trp}
	25392				260					265					270		
	25394	Ala	Tyr	Glu	Met	Phe	Arg	Asn	Glu	Arg	Ala	Ile	Arg	Phe	Val	Val	Met
	25395			275					280					285			
	25397	Val	Thr	Pro	Glu	Asp	Leu	Lys	Ala	Asn	Ala	Glu	Tyr	Ile	Lys	Met	Ala

Input Set : N:\EBONY'S\EP.txt

	25472 25473	Gln	Phe 690	Gly	His	Cys	Phe	Ser 695	Trp	Gly	Glu	Asn	Arg 700	Glu	Glu	Ala	Ile
	25475		Asn	Met	Val	Val		Leu	Lys	Glu	Leu	Ser 715	Ile	Arg	Gly	Asp	Phe 720
	25476 25478	705 Ara	Thr	Thr	Val	Glu	710 Tyr	Leu	Ile	Asn	Leu		Glu	Thr	Glu	Ser	
	25479					725					730					735	
	25481	Gln	Asn	Asn	Asp 740	Ile	Asp	Thr	Gly	Trp 745	Leu	Asp	Tyr	Leu	750	Ala	Glu
	25482 25484	Lvs	Val	Gln		Glu	Lys	Pro	Asp		Met	Leu	Gly	Val		Cys	Gly
	25485	_		755					760					765			
	25487	Ala		Asn	Val	Ala	Asp	Ala 775	Met	Phe	Arg	Thr	Cys 780	Met	Thr	Asp	Pne
	25488 25490	Leu	770 His	Ser	Leu	Glu	Arq		Gln	Val	Leu	Pro		Asp	Ser	Leu	Leu
	25491	785					790					795					800
	25493	Asn	Leu	Val	Asp		Glu	Leu	Ile	Tyr		Gly	Val	Lys	Tyr	Ile 815	Leu
	25494 25496	Twa	บวไ	λla	Λrα	805	Sar	T.e.ii	Thr	Met	810 Phe	Val	T.eu	Tle	Met		Glv
	25496	цур	vai	Ala	820	Gin	Jer	пси	1111	825	1 110	, 41	Dou		830		1
	25499	Cys	His	Ile	${\tt Glu}$	Ile	Asp	Ala		Arg	Leu	Asn	Asp		Gly	Leu	Leu
	25500	_	_	835	•	a 1		a	840	mh w	mh m	Шттт	Mot	845	Clu	Clu	Va 1
	25502 25503	Leu	850	Tyr	Asn	СТА	ASII	855	TAT	THE	TIII	тут	860	пуъ	GIU	GIU	Vai
	25505	Asp		Tyr	Arg	Ile	Thr		Gly	Asn	Lys	Thr	Cys	Val	Phe	Glu	Lys
	25506	865					870					875					880
	25508	Glu	Asn	Asp	Pro	Thr 885	Val	Leu	Arg	Ser	Pro 890	Ser	Ala	GIY	гля	ьеи 895	Thr
	25509 25511	Gln	Tvr	Thr	Val		Asp	Gly	Gly	His		Glu	Ala	Gly	Ser		Tyr
	25512				900					905					910		
	25514	Ala	Glu		Glu	Val	Met	Lys	Met 920	Ile	Met	Thr	Leu	Asn 925	Val	Gln	Glu
	25515 25517	Arσ	G1v	915 Arg	Val	Lvs	Tvr	Ile		Arq	Pro	Gly	Ala		Leu	Glu	Ala
	25518		930					935					940				
	25520		Cys	Val	Val	Ala		Leu	Glu	Leu	Asp		Pro	Ser	Lys	Val	His 960
	25521 25523		λla	Glu	Dro	Dhe	950	Glv	Glu	Leu	Pro	955 Ala	Gln	Gln	Thr	Leu	
	25524	FIO	AIU	Giu	110	965	****	011	014		970					975	
	25526	Ile	Leu	Gly		Lys	Leu	His	Gln		Phe	His	Ser	Val		Glu	Asn
	25527 25529	.	m1	3	980	Vo.	Con	C1**	Dho	985	LOU	Dro	Clu	Dro	990 Val	Dhe	Ser
F>	25529 25530	ьeu	Thr	995	Val	met	ser	СТУ	000	Cys	ьеи	PIO	GIU	005	Val	1110	DCI
	25532	Ile	Lys	Leu	Lys	Glu	Trp	Val		Lys	Leu	Met	Met	Thr	Leu	Arg	His
E>	25533		010			_		015	_	a 1.	a 3	-1 -	020		C	37 o 1	717
	25535			Leu	Pro	Leu	Leu 030	GLu	Leu	GIN	GIU	035		Thr	Ser	vai	040
臣>	25536 25538	Glv	Ara	Ile	Pro	Ala		Val	Glu	Lys	Ser			Arg	Val	Met	
E>	25539					045					050					055	
	25541		Tyr	Ala			Ile	Thr	Ser			Cys	Gln	Phe			Gln
E>	25542 25544		т1.	. ר ג	060		Lou	λan	Cve	065 His		Δla	Thr	Len	070 Gln		Lvs
	49344	GTII	TTG	та	TIIT	TTE	Leu	дор	~y 3							3	_1 -

RAW SEQUENCE LISTING

DATE: 11/01/2002 TIME: 12:24:30

PATENT APPLICATION: US/10/092,900

Input Set : N:\EBONY'S\EP.txt

				_		•	T	a1	O	7	C1	C1.	1751	T 011	Clu	Dro	Clu
	25766	GLu	мет	Tyr		ASP	ьуѕ	GIU	ser	265	СТА	СТУ	Val	цеu	270	FIO	GIU
E>	25767 25769	C1	Πh.×	Wa 1	260	т10	Tve	Dha	λνα		T.vc	Δsn	T.eu	Tle	-	Ser	Met
TO .	25779	СТУ	TIIL	275	Giu	116	цуз	rnc	280	цур	בענה	1106	204	285	2,0		
E/	25772	λνα	Δrσ	710	Δsn	Pro	Δla	Tvr		Lvs	Leu	Met	Glu		Leu	Glv	Glu
F>	25773	лгу	290	110	пор	110	111u	295					300			1	
E>	25775	Pro		Len	Ser	Asp	Lvs		Ara	Lvs	Asp	Leu	Glu	Gly	Arq	Leu	Lys
E>	25776		P				310				-	315		_	_		320
_ ,	25778	Ala	Ara	Glu	Asp	Leu		Leu	Pro	Ile	Tyr	His	Gln	Val	Ala	Val	Gln
E>	25779		5			325					330					335	
	25781	Phe	Ala	Asp	Phe	His	Asp	Thr	Pro	Gly	Arg	Met	Leu	Glu	Lys	Gly	Val
E>	25782				340					345					350		
	25784	Ile	Ser	Asp	Ile	Leu	Glu	Trp	Lys	Thr	Ala	Arg	Thr	Phe	Leu	Tyr	\mathtt{Trp}
E>	25785			355					360					365			
	25787	Arg	Leu	Arg	Arg	Leu	Leu	Leu	Glu	Asp	Gln	Val	Lys	Gln	Glu	Ile	Leu
E>	25788		370					375					380				
	25790	Gln	Ala	Ser	Gly	Glu		Ser	His	Val	His		Gln	Ser	Met	Leu	
E>	25791						390				_	395		_	_	_	400
	25793	Arg	${\tt Trp}$	Phe	Val		Thr	Glu				Lys	Ala	Tyr	Leu		Asp
E>	25794					405					410	~ 7			a 1	415	a1
	25796	Asn	Asn	Gln		Val	Val	GIn	Trp		GIu	GIn	His	Trp	GIN	Ата	СТУ
E>	25797			_	420	_	1- ·	-1 -	3	425	3	т1.	mh w	M	430	Tvc	uic
	25799	Asp	GIY		Arg	Ser	Thr	ire	440	GIU	ASII	TTE	THE	445	Leu	гур	птэ
E>	25800 25802	3		435	T 011	T a	шЬ»	т10		C117	T OU	Val	Glu		Δen	Pro	Glu
		Asp		vaı	ьeu	ьуѕ	THE	455	AIG	СТУ	ьeu	Val	460	GIU	ASII	FIO	GIG
E>	25803 25805	wa 1	450	Val	λαη	Cvc	Va l		Тиг	T.011	Ser	Gln		Tle	Ser	Pro	Ala
TO \$	25805 25806		Ата	vaı	кър	Суз	470	116	1 y 1	пси	JCI	475	1115	110	001		480
E>	25808	Glu	Δτα	Δla	Gln	Val		His	Len	Leu	Ser		Met	Asp	Ser	Pro	
E>	25809	GIG	1119	1114	0.1.1	485					490			•		495	
E>	25811	Ser	Thr			100											
	26588			EO II	D NO	: 224	4										
	26589																
	26590																
	26591	<21	3> 01	RGAN:	ISM:	Homo	o sa	pien	s								
	26593	<40	0> S	EQUE	NCE:	224											
	26594	Met	Ser	Ala	Glu	Ser	Gly	Pro	Gly	Thr	Arg	Leu	Arg	Asn	Leu		Val
	26595					5					10				_	15	
	26597	Met	Gly	Asp			Glu	Thr	Ser	Gln	Met	Ser	Thr	Thr	Gln	Ala	Gln
	26598				20						_						.
	26600	Ala	Gln		Gln	Pro	Ala	Asn		Ala	Ser	Thr	Asn		Pro	Pro	Pro
	26601		_,	35	_	5.		T	40	T	7	01 -	m l	45	C1 ~	LOU	cln
	26603	Glu		Ser	Asn	Pro	Asn		Pro	гÀ2	arg	GIN		ASI	GTIJ	ьeu	GIII
	26604	m	50	т	7	17- 1	17-7	55	T ***	mh.~	Lou	Trr	60 Twe	uie	Gln	Dhe	Δla
	26606			ьeu	arg	vaı	70	ьeu	пλг	TIIL	пец	75	ոչո	птэ	OIH	1116	80
	26607 26609			Dha	Cln	Cln		17 = 7	Δen	Δla	Va 1		T.e.u	Δen	Len	Pro	
	26610	ттЪ	PIO	rne	GTII	85	FIO	val	тэр	பாப	90	Lys	cu	11011	204	95	F
	26612	ጥህጕ	ጥህጉ	T.ve	Tle		Lvs	Thr	Pro	Met		Met.	Glv	Thr	Ile		Lys
	20012	- y -	* Y *	כעב			-15				P		1			4	-

Input Set : N:\EBONY'S\EP.txt

	26760					885					890					895	
	26762	Thr	Pro	T.eu	Len		Gln	Pro	Pro	Met		Gln	Pro	Pro	Gln	Val	Leu
	26763				900					905					910		
	26765	Leu	Glu	Asp	Glu	Glu	Pro	Pro	Ala	Pro	Pro	Leu	Thr	Ser	Met	Gln	Met
	26766	204		915					920					925			
	26768	Gln	Leu	Tvr	Leu	Gln	Gln	Leu	Gln	Lys	Val	Gln	Pro	Pro	Thr	Pro	Leu
	26769	0	930	-1-				935		•			940				
	26771	Leu		Ser	Val	Lys	Val	Gln	Ser	Gln	Pro	Pro	Pro	Pro	Leu	Pro	Pro
	26772					-	950					955					960
	26774		Pro	His	Pro	Ser	Val	Gln	Gln	Gln	Leu	Gln	Gln	Gln	Pro	Pro	Pro
	26775					965					970					975	
	26777	Pro	Pro	Pro	Pro	Gln	Pro	Gln	Pro	Pro	Pro	Gln	Gln	Gln	His	Gln	Pro
	26778				980					985					990		
	26780	Pro	Pro	Arg	Pro	Val	His	Leu	Gln	Pro	Met	${\tt Gln}$	Phe	Ser	Thr	His	Ile
E>	26781			995					000					005			
	26783	Gln	Gln	Pro	Pro	Pro	Pro	Gln	Gly	Gln	Gln	Pro	Pro	His	Pro	Pro	Pro
E>	26784		010					015					020				
	26786	Gly	Gln	Gln	Pro	Pro	Pro	Pro	Gln	Pro	Ala	Lys	Pro	Gln	Gln	Val	Ile
E>	26787						030					035					040
	26789	Gln	His	His	His	Ser	${\tt Pro}$	Arg	His	His	Lys	Ser	Asp	Pro	Tyr		Thr
E>	26790					045					050					055	_
	26792	Gly	His	Leu	Arg	Glu	Ala	Pro	Ser		Leu	Met	Ile	His		Pro	Gln
E>	26793				060					065					070		_
	26795	Met	Ser	Gln	Phe	Gln	Ser	Leu		His	Gln	Ser	Pro		Gln	Gln	Asn
E>	26796			075			_	_	080					085	_	_	1
	26798	Val		Pro	Lys	Lys	Gln		Thr	GLY	Arg	Ala		Pro	ser	Pro	Val
E>	26799	_	090				_	095	_	-1	~		100	. 1 -	17- 1	D	37.0]
	26801		Gln	Gly	Arg	GTA		Leu	Pro	Thr	ser		Ата	Ата	vaı	PLO	
E>	26802		_	~ 1	a 1	.	110	31-	3 J _	G	17n 7	115	C1 n	Dwo	Cln	Dro	120
	26804	Pro	Ser	GIn	Glu		Arg	Ala	Ата	ser		val	GIII	PIO	GIII	135	ьeu
E>	26805	77- 1	77-7	37- 1	T	125	a 1	T ***	т1.	III a	130	Dro	т1 о	т1 о	λνα		Glu
_ 、	26807	val	vaı	vaı		GIU	Gru	ьуѕ	ire	145	ser	PIO	116	116	150	Set	Giu
E>	26808 26810	Dwo	Dho	Con	140	Cor	T 011	λκα	Dro		Dro	Dro	T.vc	Hic		Glu	Ser
	26811	PIO	Pile	155	PIO	261	пец	лгу	160	GIU	110	110	ביים	165	110	014	001
F/	26813	т10	Lve		Dro	Va 1	Тълг	Va 1		Glv	Pro	Glu	Met		Pro	Va 1	Asp
E>	26814	116	170	ALG	rio	V U.I.	-1-	175	110	011		014	180				
F>	26816	Val		Ara	Pro	Val	Tle		Pro	Pro	Glu	Gln		Ala	Pro	Pro	Pro
F>	26817		O _T	111.9	110	,	190	5			0	195					200
,	26819	Glv	Ala	Pro	Asp	Lvs		Lvs	Gln	Lvs	Gln		Pro	Lys	Thr	Pro	Val
E>	26820		11110			205		1		1	210			-		215	
_ ,	26822	Ala	Pro	Lvs	Lvs	_	Leu	Lvs	Ile	Lys	Asn	Met	Gly	Ser	Trp	Ala	Ser
E>	26823			-1-	220			-		225			-		230		
-	26825	Leu	Val	Gln		His	Pro	Thr	Thr		Ser	Ser	Thr	Ala	Lys	Ser	Ser
E>	26826			235					240					245	-		
_	26828		Asp		Phe	Glu	Gln	Phe	Arg	Arg	Ala	Ala	Arg	Glu	Lys	Glu	Glu
E>	26829		250					255	_	_			260				
	26831	Arg		Lys	Ala	Leu	Lys	Ala	Gln	Ala	Glu	His	Ala	Glu	Lys	Glu	Lys
E>	26832			_			270					275					280

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/092,900

DATE: 11/01/2002
TIME: 12:24:30

Input Set : N:\EBONY'S\EP.txt

F >	26834 26835	Glu	Arg	Leu	Arg	Gln 285	Glu	Arg	Met	Arg	Ser 290	Arg	Glu	Asp	Glu	Asp 295	Ala
E>	26837	Leu	Glu	Gln	Ala		Arq	Ala	His	Glu		Ala	Arg	Arg	Arg		Glu
E>	26838				300					305					310		
	26840	${\tt Gln}$	Gln	${\tt Gln}$	Gln	Gln	Arg	Gln		Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln
E>	26841			315				_	320	_			_	325	_	_	
	26843	Ala		Ala	Val	Ala	Ala		Ala	Thr	Pro	Gln		Gln	Ser	Ser	Gln
E>	26844	_	330		37.1	.		335	a1	3	01	T	340	7	T	7 ~~	C1.,
	26846		GIn	ser	мет	Leu	350	GIN	GIN	Arg	GIU	355	Ala	Arg	гуѕ	Arg	360
E>	26847 26849		Glu	Δra	Δrα	Δra		Glu	Δla	Met	Δla		Thr	Tle	Asp	Met	
E>	26850	GIII	GIU	Arg	nrg	365	пту	O.L.u	niu	1100	370	2114		110	шьр	375	
_ ,	26852	Phe	Gln	Ser	asp		Leu	Ser	Ile	Phe		Glu	Asn	Leu	Phe	- • -	
E>	26853				380					385					390		
	27616	<210	0> SI	EQ II	ON C	: 230)										
	27617	<21	1> LI	ENGTI	H: 10	13											
	27618	<212	2> TY	YPE:	PRT												
	27619						sap	piens	3							٠	
	27621						_			_		_	_	_	_1		_
	27622		Glu	Asp	Glu	Glu	Gly	Pro	Glu	Tyr		Lys	Pro	Asp	Phe		Leu
	27623	1	3	01 -	17- 1	ш b	Wat.	<i>c</i> 1	7.00	Dho	10	7 ~ ~	7 an	Tou	Cln	15	λνα
	27625 27626	ьeu	Asp	GIII	20	THE	met	GIU	ASP	25	мес	AIG	ASII	ьeu	30	ьец	AIG
	27628	Dhe	Glu	T.vg		Arσ	Tle	Tvr	Thr		Tle	Glv	Glu	Va1		Va1	Ser
	27629	1 110	GIU	35	011	**** 9	110	-1-	40	+1-		011		45			
	27631	Val	Asn	Pro	Tyr	Gln	Glu	Leu	Pro	Leu	Tyr	Gly	Pro	Glu	Ala	Ile	Ala
	27632		50					55					60				
	27634	Arg	Tyr	Gln	Gly	Arg		Leu	Tyr	Glu	Arg		Pro	His	Leu	Tyr	
•	27635	65		_			_70	_		20-4	.	75	•	0	3	3	80 mb
	27637	Val	Ala	Asn	Ala		Tyr	Lys	Ala	мет	ьys	HIS	Arg	ser	Arg	ASP 95	Thr
	27638 27640	Crra	тіо	17 a 1	Tlo	85 Sor	C117	Clu	Sor	Clv		G1 v	Taye	Thr	Glu		Ser
	27641	СуБ	116	Val	100	SET	GLY	Giu	Ser	105	ALU	OLY	цу	1111	110	1114	DCI
	27643	Lvs	His	Ile		Gln	Tyr	Ile	Ala		Val	Thr	Asn	Pro	Ser	Gln	Arg
	27644	-1-		115					120					125			
	27646	Ala	Glu	Val	Glu	Arg	Val	Lys	Asp	Val	Leu	Leu	Lys	Ser	Thr	Cys	Val
	27647		130					135					140				
	27649		Glu	Ala	Phe	Gly		Ala	Arg	Thr	Asn		Asn	His	Asn	Ser	
	27650					_	150	_		_		155	-1	_	a.1	_	160
	27652	Arg	Phe	GLy	Lys		Met	Asp	Ile	Asn	Phe	Asp	Pne	гля	GTĀ	Asp	Pro
	27653	т1.	a 1	01	m: a	165	mi a	Com	m	T 011	170	C1.1	T 77.0	Sor	λνα	175	Lou
	27655 27656	тте	атА	стХ	180	тте	птэ	ser	т Ат.	185	ьеи	GIU	nys	SET	190	val	ьeu
	27658	Lve	Gln	Hic		Glv	Glu	Ara	Asn		His	Ala	Phe	Tvr		Leu	Leu
	27659	פעב	O 1 11	195	, 41	J-1	J_u	9	200					205			
	27661	Ara	Gly		Glu	Asp	Lys	Gln		His	Glu	Leu	His		Glu	Arg	Asn
	27662	,	210			_	-	215					220				
	27664	Pro	Ala	Val	Tyr	Asn	Phe	Thr	His	Gln	Gly	Ala	Gly	Leu	Asn	Met	
	27665	225					230					235					240

RAW SEQUENCE LISTING

DATE: 11/01/2002 TIME: 12:24:31

PATENT APPLICATION: US/10/092,900

Input Set : N:\EBONY'S\EP.txt

28648	28647	<210)> SE	Q ID	NO:	240)										
28650 2413 ORGANISM: Homo sapiens Series 240 28653 Met Asn Asn Tyr Val Leu Asn Asp Glu Ile Gly Gly Ala Phe Ser 28654 1	28648	<211	> LE	ENGTH	: 13	301											
28652 2400 SEQUENCE: 240 28653 Met Ash Ash Tyr Val Leu Ash Ash Tyr Val Ash Ash Tyr Val Ash Ash Tyr Ash Ash Tyr Ash Ash Tyr Ash Ash Tyr Ash Ash Ash Tyr Ash Ash Ash Tyr Ash	28649	<212	2> TY	PE:	PRT												
2865 1	28650	<213	3> OF	RGANI	SM:	Homo	sap	iens	5								
1	28652	<400)> SE	EQUEN	ICE:	240											
1	28653	Met	Asn	Asn	Tyr	Val	Leu	Asn	Asp	Glu	Ile	Gly	Gln	Gly	Ala	Phe	Ser
1865 180 18	28654	1				5					10					15	
1865 180 18	28656	Thr	Ile	Tyr	Lys	Gly	Arg	Tyr	Arg	Thr	Thr	Thr	Glu	Phe	Tyr	Ala	Ile
28659	28657				20					25					30		
1	28659	Ala	Ser	Ile	Asp	Lys	Lys	Arg	Arg	Glu	Arg	Val	Val	Asn	Cys	Val	Gln
Note	28660			35					40					45			
Secondary Seco	28662	Leu	Leu	Arq	Ser	Met	His	His	Ser	Asn	Val	Ile	Glu	Phe	His	Asn	\mathtt{Trp}
28665 Tyr Glu Thr Asn Asn His Leu Tyr Ile Ile Thr To Bo	28663		50					55					60				
28666 65 yabaa Met Ser Thr 11e Leu Arg Ser Asn 11e Asn 11e Asn 11e Asn Leu Thr Thr Gln 28669 yabaa Ser Asp Ser Asp 11e Asp yabaa Asp Leu Asp Leu Met Thr Thr Thr Gln Asp Leu Asp Leu Gln Thr Thr Asp Leu Met Thr Thr Asp Leu Met Asp Leu Leu Leu Leu Thr Asp Leu Leu <t< td=""><td>28665</td><td>Tvr</td><td>Glu</td><td>Thr</td><td>Asn</td><td>Asn</td><td>His</td><td>Leu</td><td>Trp</td><td>Ile</td><td>Ile</td><td>Thr</td><td>Glu</td><td>Tyr</td><td>Cys</td><td>Thr</td><td>Gly</td></t<>	28665	Tvr	Glu	Thr	Asn	Asn	His	Leu	Trp	Ile	Ile	Thr	Glu	Tyr	Cys	Thr	Gly
28668 Gly Asp Met Ser Thr Ile Leu Arg Ser Asn Ile Asn Ile Thr Thr Thr 90 28671 Ala Val Gln Ala Phe Gly Asp Asp Val Ala Met Gly Tyr Ile 28674 His Ser Lys Gly Val Val Tyr Asp Leu Gly Leu Leu 110 110 120 <td></td> <td>75</td> <td></td> <td></td> <td></td> <td></td> <td>80</td>												75					80
28669 Framework 190 Framework 190 190 190 190 190 190 190 190 190 190 110 120 110 120	28668	Glv	Asp	Met	Ser	Thr	Ile	Leu	Arq	Ser	Asn	Ile	Asn	Leu	Thr	Thr	Gln
28671 Ala Val Gln Ala Phe Gly Arg Ar		0-1							_		90					95	
28674 His Ser Lys Gly Val Val Tyr Asp Leu Gly Thr Asp Leu Thr Arg Asp Leu Thr Arg Asp Leu Thr Arg Asp Leu Thr Arg Asp Hel Ser Leu Ala Met Leu Asp Hel His Asp Phe Ser Leu Ala Cys 130 Leu Phe His Asp Phe Ser Leu Ala Ala Thr 150 Leu Thr 160 Leu Thr Ala Ala </td <td>28671</td> <td>Δla</td> <td>Va 1</td> <td>Gln</td> <td>Ala</td> <td></td> <td>Glv</td> <td>Arq</td> <td>Asp</td> <td>Val</td> <td>Ala</td> <td>Met</td> <td>Gly</td> <td>Leu</td> <td>Met</td> <td>Tyr</td> <td>Ile</td>	28671	Δla	Va 1	Gln	Ala		Glv	Arq	Asp	Val	Ala	Met	Gly	Leu	Met	Tyr	Ile
28674 His Ser Lys Gly Val Val Tyr Asn Asp Leu Gln Thr Arg Asn Leu Le		21.1.0	,	0.1.1.			1		-				-		110		
28675 Het Asp of Ala Ala Met Leu Arg Phe His Asp Phe Ser Leu Ala Cys Cys Phe Phe Ala 28678 130 130 135 140<	28674	Иiс	Ser	Lvs		Val	Val	Tvr	Asn	Asp	Leu	Gln	Thr	Arg	Asn	Leu	Leu
28677 Met Asp Ser Ala Ala Met Leu Arg Phe His Asp Phe Ser Leu Ala Cys 28680 Leu Phe Gln Asp Ala Ala Thr Arg Pro Leu Val Gly Thr Pro Leu Tyr Tyr Leu Tyr Ala Ala </td <td></td> <td>1115</td> <td>DCI</td> <td></td> <td></td> <td></td> <td></td> <td>-1-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>125</td> <td></td> <td></td> <td></td>		1115	DCI					-1-						125			
28678 Leu Phe Gln Asp Ala Ala Thr Arg Pro Leu Val Gly Thr Pro Leu Thy 150 150 155 155 150 160 160 28683 Met Ala Pro Glu Leu Phe Met Ala Arg Pro Leu Tyr Ser Met Ala Arg Arg Pro Leu Thr Arg 180 170 170 Leu Tyr Ser Met Ala 170 170 Leu Tyr Ser Met Ala Ala Arg Leu Intr Ser Pro Pro Bro Arg Leu Intr Intr <td< td=""><td>28677</td><td>Mot</td><td>Δsn</td><td></td><td>Ala</td><td>Ala</td><td>Met</td><td>Leu</td><td></td><td>Phe</td><td>His</td><td>Asp</td><td>Phe</td><td>Ser</td><td>Leu</td><td>Ala</td><td>Cys</td></td<>	28677	Mot	Δsn		Ala	Ala	Met	Leu		Phe	His	Asp	Phe	Ser	Leu	Ala	Cys
28680 Leu Phe Gln Asp Ala Ala Thr Arg Pro Leu Val Gly Thr Pro Leu Tyr 28681 145 - - 150 - - 155 - - - 160 28684 Met Ala Pro Blu Leu Pro Met Ala Asp Pro Leu Ala Ala 28686 Ser Asp Leu Trp Ser Phe Gly Cys Val Leu His Glu Leu Ala Thr Gly Pro Int Gly Int Int <t< td=""><td></td><td>ricc</td><td>_</td><td>DCI</td><td></td><td></td><td></td><td></td><td> ,</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td>_</td></t<>		ricc	_	DCI					,			-					_
28681 145 Image: color of the color	20070	LOU		Gln	Δsn	Δla	Δla		Ara	Pro	Leu	Val	Glv	Thr	Pro	Leu	Tyr
28683 Met Ala Pro Glu Leu Phe Met Ala Asp Arg Pro Leu Tyr Ser Met Ala 28684			THE	OIII	no _P	1114			5				-				160
28684 Ser Asp Asp Leu Trp Ser Phe Gly Cys Val Leu His Glu Leu Ala Thr Gly 18687 180	20001	Mot	λla	Dro	Glu	T.e.u		Met	Αla	Asp	Ara	Pro	Leu	Tyr	Ser	Met	Ala
28686 Ser Asp Leu Trp Ser Phe Gly Cys Val Leu His Glu Leu Ala Thr Gly 28687 Lys Pro Pro Phe Ala Ala Ser Asp Leu Glu Thr Leu Gly Asp Ile 28689 Leu Thr Ser Pro Thr Pro Ala Val Pro Gly Ala Pro Gly Ala Pro Bro Pro Gly Ala Bro Gly Ala Ala Ala Pro Leu Leu Ala Ala Ala Ala Ala Ala Ala		Mec	Ата	110	Olu		1 110	1100						1		175	
28687 Lys Pro Pro Phe Ala Ala Ala Ser Asp Leu Glu Thr Leu Gly Asp Ile 28690 Leu Thr Ser Pro Thr Pro Ala Val Pro Gly Ala Val Pro Gly Ala Val Pro Gly Ala Val Pro Gly Ala Val Asp Pro Bro Ala Val Ala Pro Bro Ala Val Ala Val Ala Ala Val Ala <	20004	cor	λen	Lan	Trn		Phe	Glv	Cvs	Val		His	Glu	Leu	Ala	Thr	Gly
28689 Lys Pro Pro Phe Ala Ala Ser Asp Leu Glu Thr Leu Leu Gly Asp Ile 28690		261	пэр	пси		DCI	1 110		010	185			-		190		-
28690 Leu Thr Ser Pro Thr Pro Ala Val Pro Gly Ala Pro Bly Ala Ala Ala Pro Leu Leu Leu Bly Ala Ala <td< td=""><td>20007</td><td>Two</td><td>Dro</td><td>Dro</td><td></td><td>Δla</td><td>Δla</td><td>Ser</td><td>Asn</td><td></td><td>Glu</td><td>Thr</td><td>Leu</td><td>Leu</td><td>Gly</td><td>Asp</td><td>Ile</td></td<>	20007	Two	Dro	Dro		Δla	Δla	Ser	Asn		Glu	Thr	Leu	Leu	Gly	Asp	Ile
28692 Leu Thr Ser Pro Thr Pro Ala Val Pro Gly Ala Pro Gly Ala Pro Gly Ala Val Pro Gly Ala Val Leu Leu Gly Leu Glu Lys Asp Pro Leu Lys Arg Tyr Ala 28698 Trp Val Asp Val Arg Ser Glu Phe Trp Asp Glu Pro Leu Lys Arg Tyr Ala 28699 Trp Val Asp Val Val Arg Ser Glu Phe Trp Asp Glu Pro Leu Pro Leu Pro Leu Pro Leu Pro Leu Leu Pro Leu Leu </td <td></td> <td></td> <td>FIO</td> <td></td> <td>1110</td> <td>2124</td> <td>2124</td> <td>501</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>205</td> <td>-</td> <td>-</td> <td></td>			FIO		1110	2124	2124	501						205	-	-	
28693 210 215 220 28695 Thr Leu Leu Leu Cys Gly Leu Leu Glu Lys Asp Pro Leu Lys Arg Tyr Ala 28696 225 230 230 235 235 240 28698 Trp Val Asp Val Asp Val Val Arg Ser Glu Pro Leu 245 250 250 255 255 28701 Pro Ser Asn Gly Phe Pro Ser Gln Val Ala Trp Glu Asp Tyr Lys Arg 260 260 265 270 270 270 28702 275 260 280 280 280 270 270 270 270 28705 275 275 280 280 287 287 287 287 287 287 288 287 287 288 287 288 287 288 287 288 287 288 288 287 288 288 287 288 2	20030	Tou	Thr	Sar	Dro	Thr	Pro	Δla		Pro	Glv	Ala	Pro	Glu	Ser	Phe	Gln
28695 Thr Leu Leu Cys Gly Leu Leu Glu Lys Asp Pro Leu Lys Arg Tyr Ala 28696 225				OCI	110	1111	110				1						
28696 225 230 235 240 28698 Trp Val Asp Val Arg Ser Glu Phe Trp Asp Glu Pro Leu Pro Leu 245 255 270 255 270 255 270 270 270 270 270 270 270 270 270 270 287 287 285 <	20093	Thr	LOU	Τ.Δ11	Cvs	Glv	Len		Glu	Lvs	Asp	Pro		Lvs	Arq	Tyr	Ala
28698 Trp Val Asp Val Arg Ser Glu Phe Trp Asp Glu Pro Leu Pro Leu 28699 28701 Pro Ser Asp Yal Arg Ser Gly Phe Pro Ser Gln Val Ala Trp Glu Asp Tyr Lys Arg 28702 260 260 265 265 270 270 270 28704 Ser Arg Ser Gly Arg Gly Ala Ser Gln Tyr Asn Trp Thr Asp Ser Asp 28705 275 275 280 280 285			Lieu	neu	Суз	Gry		БСи	014	L 10	шр			-1-	5	- 1	240
28699 245 250 255 28701 Pro Ser Asn Gly Phe Pro Ser Gln Val Ala Trp Glu Asp Tyr Lys Arg 28702 28702 260 260 265 265 270	20090	mrn	va 1	λαn	Val	Val		Ser	Glu	Phe	Tro		Glu	Pro	Leu	Pro	Leu
28701 Pro Ser Asn Gly Phe Pro Ser Gln Val Ala Trp Glu Asp Tyr Lys Arg 28702			vaı	кър	vaı			DCI	Olu	1 110						255	
28702	20033	Dro	Cor	λan	Clv			Ser	G1n	Val			Glu	Asp	Tvr	Lvs	Arq
28704 Ser Arg Ser Gly Arg Gly Ala Ser Gln Tyr Asn Trp Thr Asp Ser Asp 28705			ser	ASII			rio	JCI	0111				0		270	-1-	
28705	20702	O	7	Com	200	7 200	C137	λla	Car		Tur	Δen	Trn	Thr		Ser	Asp
28707 Val Arg Val Ala Val Ala His Ala Val Gly Ala Ala Lys Ser Asn Ala 28708 290 295 300 28710 Ser Thr His Asn Val Glu Glu Arg Glu Arg Ala Ala Ala Ala Thr Leu Asn 28711 305 310 315 320 28713 Val Ala Lys Glu Leu Asp Phe Thr Ala Ser Ala Ala Met Leu Glu 28714 325 330 335 28716 Arg Leu Pro Glu Arg Thr Gln Glu Arg Ala Ala His Ala Thr Gly His			Arg		СТУ	AIG	СТУ	Ата	280	GIII	1 Y 1	HUII	111	285	110p	202	1101
28708 290 295 300 28710 Ser Thr His Asn Val Glu Glu Arg Glu Arg Ala Ala Ala Thr Leu Asn 28711 305 310 315 320 28713 Val Ala Lys Glu Leu Asp Phe Thr Ala Ser Ala Ala Met Leu Glu 28714 325 330 335 28716 Arg Leu Pro Glu Arg Thr Gln Glu Arg Ala Ala His Ala Thr Gly His	28705	77-1	3		7 J a	17.5.1	717	uic			Clv	λla	Δla			Asn	Ala
28710 Ser Thr His Asn Val Glu Glu Arg Glu Arg Ala Ala Ala Thr Leu Asn 28711 305 310 315 320 28713 Val Ala Lys Glu Leu Asp Phe Thr Ala Ser Ala Ala Met Leu Leu Glu 28714 325 330 335 28716 Arg Leu Pro Glu Arg Thr Gln Glu Arg Ala Ala His Ala Thr Gly His			-	Val	Ата	Val	Ата			Val	Gry	AIU		шуо	DCI	11011	1124
28711 305 310 315 320 28713 Val Ala Lys Glu Leu Asp Phe Thr Ala Ser Ala Ala Met Leu Leu Glu 28714 325 330 335 28716 Arg Leu Pro Glu Arg Thr Gln Glu Arg Ala Ala His Ala Thr Gly His	28/08	_	290	** / =		77 7	a 1			C111	7 ~~	λla		λla	Thr	T.611	Δsn
28713 Val Ala Lys Glu Leu Asp Phe Thr Ala Ser Ala Ala Met Leu Glu 28714 325 330 335 28716 Arg Leu Pro Glu Arg Thr Gln Glu Arg Ala Ala His Ala Thr Gly His			rnr	HlS	asn	val		GIU	нта	GIU	тту	215	vra	лта	T 11T	LCu	320
28714 325 330 335 28716 Arg Leu Pro Glu Arg Thr Gln Glu Arg Ala Ala His Ala Thr Gly His	28711	305		_	~ 1	.		Dh a	mh w	21-	Cor		717 -	Mot	Lan	T.011	
28716 Arg Leu Pro Glu Arg Thr Gln Glu Arg Ala Ala His Ala Thr Gly His			Ala	ьуs	GIU			Pne	THI	ATG		нта	нта	Met	пеп	325	JIU
	28714	_	_	_	a ?	325	m1	01 -	01. -	A		7 1~	ui c	λ1 ~	ጥሎ∽		иiс
28717 340 345 350			Leu	Pro			rnr	GIN	GIU			ATG	птЗ	нта	3 ピ レ エ 111 ፒ	стх	1113
	28717				340					343					550		

Input Set : N:\EBONY'S\EP.txt

	28792				740					745					750		
	28794	Arσ	Ser	Arq	Val	Ser	Asn	Arq	Phe	Met	Arg	Tyr	Phe	Asn	Tyr	Leu	Ala
	28795	5		755				-	760		_	_		765			
	28797	Phe	Pro	Glu	Met	Ser	Asp	Met	Ser	Lys	Arg	Thr	Ile	Leu	Gln	Ala	Ile
	28798		770				-	775		-	_		780				
	28800	Leu		Glv	Glv	Leu	Ala	Gln	Ser	Gly	Leu	Ala	Asp	Arg	Leu	Ala	Asn
	28801			1	1		790			•		795	-	_			800
	28803		Ala	Ser	Ala	Val	Val	Asp	Ser	Thr	Leu	Arg	Val	Phe	Arg	Lys	Cys
	28804					805		-			810	_			_	815	_
	28806	Thr	Gln	Val	Phe		Pro	Thr	Pro	Ala	His	Val	His	Tyr	Ser	Phe	Asn
	28807		0		820					825				-	830		
	28809	Met	Arσ	Asp		Met.	Arq	Val	Phe	Pro	Leu	Leu	Tyr	Thr	Ala	Asp	Lys
	28810		* 5	835			,		840				-	845			
	28812	Ser	Val		Gln	Ser	Glu	Glu	Ser	Ile	Val	Arq	Leu	Trp	Met	His	Glu
	28813		850			-		855					860	_			
	28815	Met		Ara	Va l	Phe	Tvr	Asp	Arq	Leu	Val	Asp	Ala	Thr	Asp	Lys	Gly
	28816		01	5			870					875			-	-	880
	28818		Phe	Tle	Glu	Tvr	Leu	Asn	Ala	Glu	Leu	Pro	Ser	Met	Gly	Val	Asp
	28819	200				885					890				_	895	_
	28821	Lvs	Ser	Tvr	Asn	Glu	Val	Val	Lvs	Ala	Asp	Arq	Leu	Ile	Phe	Ala	Asp
	28822	270	501	-1-	900	Ÿ			-1-	905		,			910		-
	28824	Va 1	Leu	Ser		Lvs	Glv	Val	Tvr	Glu	Gln	Ile	Thr	Asp	Met	Asn	Ala
	28825	, 41		915		-1-	1		920					925			
	28827	Len	Thr		Ara	Met.	Asn	Glu	Leu	Leu	Glu	Ala	Tyr	Asn	Asp	Glu	Asn
	28828		930		5			935					940		-		
	28830	Glu		Lvs	Met	Asn	Leu	Val	Leu	Phe	Leu	Asp	Ala	Ile	Glu	His	Val
	28831			-1-			950					955					960
	28833		Ara	Ile	Ser	Arq	Val	Leu	Arq	Leu	Pro	Asn	Gly	His	Cys	Leu	Leu
	28834	-1-	5			965			-		970		_			975	
	28836	Leu	Glv	Val	Gly	Gly	Ser	Gly	Arg	Lys	Ser	Leu	Thr	Arg	Leu	Ala	Cys
	28837		•		980	-		_	_	985					990		
	28839	Ser	Leu	Ile	Ala	Glu	Met	Glu	Val	Phe	Thr	Ile	Glu	Leu	Ser	Lys	Asn
E>	28840			995					000					005			
	28842	Phe	Gly	Val	Lys	Glu	Trp	His	Glu	Ser	Leu	Ala	Lys	Leu	Leu	Leu	Glu
E>	28843		010		_			015					020				
	28845	Cys	Gly	Lys	Asp	Glu	Lys	Lys	Arg	Thr	Phe	Leu	Phe	Ala	Asp	Thr	Gln
E>	28846	025					030					035					040
	28848	Leu	Ala	His	Pro	Thr	Phe	Leu	Glu	Asp	Val	Ala	Gly	Leu	Leu	Thr	Ser
E>	28849					045					050					055	
	28851	Gly	Asp	Val	Pro	Asn	Leu	Phe	Glu	Asp	Gln	Asp	Ile	Glu	Leu	Ile	Asn
E>	28852	-	-		060					065					070		
	28854	Asp	Lys	Phe	Arg	Gly	Val	Cys	Leu	Ser	Glu	Asn	Leu	Pro	Thr	Thr	Lys
E>	28855			075					080					085			
	28857	Val	Ser	Val	Tyr	Ala	Arg	Phe	Val	Lys	Glu	Ala	Arg	Ala	Asn	Leu	His
E>	28858		090					095					100				
	28860	Leu	Val	Leu	Ala	Phe	Ser	Pro	Ile	Gly	Glu	Ala	Phe	Arg	Ser	Arg	Leu
E>	28861	105					110					115					120
	28863	Arg	Met	Phe	Pro	Ser	Leu	Ile	Ala	Cys	Cys	Thr	Ile	Asp	Trp	Phe	Ala
E>	28864	_				125					130					135	

Input Set : N:\EBONY'S\EP.txt

	28866	Glu	Trp	Pro		Glu	Ala	Leu	Leu	Ser 145	Val	Ala	Ala	Val	Gln 150	Leu	Asn
E>	28867 28869	Ala	Gly	Asp	140 Val	Thr	Asp	Val	Met		Ala	Ala	Ser	His		Asp	Leu
E>	28870		_	155					160					165			
	28872	Pro	Gly	Cys	Phe	Gln	Ala	Val	His	Arg	Ala	Ala	Ala	Glu	Val	Thr	Glu
E>	28873		170	_				175					180				
	28875	Arg	Phe	Phe	Thr	Glu	Thr	Arg	Arg	Arg	Ser	Tyr	Val	Thr	Pro	Thr	Ser
E>	28876	_					190					195					200
	28878	Tyr	Leu	Ser	Leu	Leu	Ser	Asn	Phe	Lys	Val	Met	Ala	Ala	Ala	Lys	Arg
E>	28879	-				205					210					215	
	28881	Arg	Phe	Val	Arg	Glu	Gln	Arg	Gly	Arg	Leu	Glu	Lys	Gly	Leu	Glu	Lys
E>	28882				220					225					230		
	28884	Leu	Arg	His	Thr	Glu	Val	Gln	Val	Ala	Glu	Leu	Glu	Ala	Gln	Leu	Lys
E>	28885			235					240					245			
	28887	Ala	${\tt Gln}$	Gln	Pro	Val	Leu	Val	Gln	Lys	Lys	Ala	Glu	Ile	Gln	Ser	Met
E>	28888		250					255					260				
	28890	Met	Glu	Arg	Leu	Thr	Val	Asp	Arg	Lys	Glu		Ala	Val	Lys	Glu	
E>	28891						270					275					280
	28893	Asp	Ala	Arg	Arg	Glu	Ala	Gln	Leu	Pro		Gly	Arg	Ala	Ala		Gly
E>	28894					285					290					295	
	28896	_	Glu	Asp		Glu											
E>	28897				300												
	31389						1										
	31390					943											
	21201																
	31391																
	31392	<213	3> 01	RGAN	ISM:		sa _l	piens	s								
	31392 31394	<213 <400	3> 01 0> S1	RGANI EQUEI	ISM: NCE:	264	_			Tera	l an	C1	C1 n	Wa 1	Tlo	Tlo	Cor
	31392 31394 31395	<213 <400 Met	3> 01 0> S1	RGANI EQUEI	ISM: NCE:	264 Ile	_			Lys		Gly	Gln	Val	Ile		Ser
	31392 31394 31395 31396	<213 <400 Met	3> 01 0> S1 Pro	RGANI EQUEI Ile	ISM: NCE: Arg	264 Ile 5	Thr	Trp	Arg		10					15	
	31392 31394 31395 31396 31398	<213 <400 Met	3> 01 0> S1 Pro	RGANI EQUEI Ile	ISM: NCE: Arg Val	264 Ile 5	Thr	Trp	Arg	Lys	10				Ser	15	
	31392 31394 31395 31396 31398 31399	<213 <400 Met 1 Gly	3> 01)> SI Pro Ser	RGANI EQUEN Ile Gly	ISM: NCE: Arg Val 20	264 Ile 5 Thr	Thr	Trp Glu	Arg Ser	Lys 25	10 Glu	Phe	Met	Ser	Ser 30	15 Leu	Gln
	31392 31394 31395 31396 31398 31399 31401	<213 <400 Met 1 Gly	3> 01)> SI Pro Ser	RGANI EQUEN Ile Gly Ser	ISM: NCE: Arg Val 20	264 Ile 5 Thr	Thr	Trp Glu	Arg Ser His	Lys 25	10 Glu	Phe	Met	Ser Thr	Ser 30	15 Leu	Gln
	31392 31394 31395 31396 31398 31399 31401 31402	<213 <400 Met 1 Gly	3> 01)> SI Pro Ser Ser	RGANI EQUEN Ile Gly Ser 35	ISM: NCE: Arg Val 20 Val	264 Ile 5 Thr	Thr Ile Leu	Trp Glu Lys	Arg Ser His 40	Lys 25 Asn	10 Glu Gly	Phe Asn	Met Tyr	Ser Thr 45	Ser 30 Cys	15 Leu Ile	Gln Ala
	31392 31394 31395 31396 31398 31399 31401	<213 <400 Met 1 Gly	3> 01)> SI Pro Ser Ser	RGANI EQUEN Ile Gly Ser 35	ISM: NCE: Arg Val 20 Val	264 Ile 5 Thr	Thr Ile Leu	Trp Glu Lys	Arg Ser His 40	Lys 25 Asn	10 Glu Gly	Phe Asn	Met Tyr	Ser Thr 45	Ser 30 Cys	15 Leu Ile	Gln Ala
	31394 31395 31396 31398 31399 31401 31402 31404	<213 <400 Met 1 Gly Ile Ser	3> Ol 0> Sl Pro Ser Ser Asn 50	RGANI EQUEN Ile Gly Ser 35 Ala	ISM: NCE: Arg Val 20 Val Ala	264 Ile 5 Thr Ser	Thr Ile Leu Thr	Trp Glu Lys Val	Arg Ser His 40 Ser	Lys 25 Asn Ile	10 Glu Gly Val	Phe Asn Ser	Met Tyr Pro 60	Ser Thr 45 Glu	Ser 30 Cys His	15 Leu Ile Arg	Gln Ala Phe
	31392 31394 31395 31396 31399 31401 31402 31404 31405 31407 31408	<213 <400 Met 1 Gly Ile Ser Phe 65	3> Ol D> SI Pro Ser Ser Asn 50	RGANI EQUEN Ile Gly Ser 35 Ala	ISM: NCE: Arg Val 20 Val Ala	264 Ile 5 Thr Ser Ala	Thr Ile Leu Thr Gly 70	Trp Glu Lys Val 55 Gly	Arg Ser His 40 Ser Leu	Lys 25 Asn Ile Tyr	10 Glu Gly Val Ile	Phe Asn Ser Ser 75	Met Tyr Pro 60 Asp	Ser Thr 45 Glu Val	Ser 30 Cys His	15 Leu Ile Arg Lys	Gln Ala Phe Glu 80
	31392 31394 31395 31396 31398 31399 31401 31402 31404 31405 31407	<213 <400 Met 1 Gly Ile Ser Phe 65	3> Ol D> SI Pro Ser Ser Asn 50	RGANI EQUEN Ile Gly Ser 35 Ala	ISM: NCE: Arg Val 20 Val Ala	264 Ile 5 Thr Ser Ala	Thr Ile Leu Thr Gly 70	Trp Glu Lys Val 55 Gly	Arg Ser His 40 Ser Leu	Lys 25 Asn Ile Tyr	10 Glu Gly Val Ile	Phe Asn Ser Ser 75	Met Tyr Pro 60 Asp	Ser Thr 45 Glu Val	Ser 30 Cys His	15 Leu Ile Arg Lys	Gln Ala Phe Glu 80
	31394 31395 31396 31398 31399 31401 31402 31404 31405 31407 31408 31410 31411	<21: <400 Met 1 Gly Ile Ser Phe 65 Asp	3> OI Pro Ser Ser Asn 50 Ile	RGANI EQUEN Ile Gly Ser 35 Ala Thr	ISM: NCE: Arg Val 20 Val Ala Tyr	264 Ile 5 Thr Ser Ala His Thr 85	Thr Ile Leu Thr Gly 70 Tyr	Trp Glu Lys Val 55 Gly Arg	Arg Ser His 40 Ser Leu Cys	Lys 25 Asn Ile Tyr	10 Glu Gly Val Ile Thr 90	Phe Asn Ser Ser 75 Lys	Met Tyr Pro 60 Asp	Ser Thr 45 Glu Val Lys	Ser 30 Cys His Gln	15 Leu Ile Arg Lys Ser 95	Gln Ala Phe Glu 80 Gly
	31394 31395 31396 31398 31399 31401 31402 31404 31405 31407 31408 31410	<21: <400 Met 1 Gly Ile Ser Phe 65 Asp	3> OI Pro Ser Ser Asn 50 Ile	RGANI EQUEN Ile Gly Ser 35 Ala Thr	ISM: NCE: Arg Val 20 Val Ala Tyr	264 Ile 5 Thr Ser Ala His Thr 85	Thr Ile Leu Thr Gly 70 Tyr	Trp Glu Lys Val 55 Gly Arg	Arg Ser His 40 Ser Leu Cys	Lys 25 Asn Ile Tyr Ile Arg	10 Glu Gly Val Ile Thr 90	Phe Asn Ser Ser 75 Lys	Met Tyr Pro 60 Asp	Ser Thr 45 Glu Val Lys	Ser 30 Cys His Gln Tyr	15 Leu Ile Arg Lys Ser 95	Gln Ala Phe Glu 80 Gly
	31394 31395 31396 31398 31399 31401 31402 31404 31405 31407 31408 31410 31411 31413 31414	<21: <400 Met 1 Gly Ile Ser Phe 65 Asp	3> OI Pro Ser Ser Asn 50 Ile Ala	RGANI EQUENT Ile Gly Ser 35 Ala Thr Leu	ISM: NCE: Arg Val 20 Val Ala Tyr Ser Gln 100	264 Ile 5 Thr Ser Ala His Thr 85 Ser	Thr Ile Leu Thr Gly 70 Tyr Asn	Trp Glu Lys Val 55 Gly Arg Gly	Arg Ser His 40 Ser Leu Cys Ala	Lys 25 Asn Ile Tyr Ile Arg 105	10 Glu Gly Val Ile Thr 90 Leu	Phe Asn Ser 75 Lys Ser	Met Tyr Pro 60 Asp His	Ser Thr 45 Glu Val Lys Thr	Ser 30 Cys His Gln Tyr Asp	15 Leu Ile Arg Lys Ser 95 Pro	Gln Ala Phe Glu 80 Gly Ala
	31394 31395 31396 31398 31399 31401 31402 31404 31405 31410 31411 31413 31414 31416	<21: <400 Met 1 Gly Ile Ser Phe 65 Asp Glu Glu	3> OI Pro Ser Ser Asn 50 Ile Ala	RGANIEQUENT ILE Gly Ser 35 Ala Thr Leu Arg	ISM: NCE: Arg Val 20 Val Ala Tyr Ser Gln 100	264 Ile 5 Thr Ser Ala His Thr 85 Ser	Thr Ile Leu Thr Gly 70 Tyr Asn	Trp Glu Lys Val 55 Gly Arg Gly	Arg Ser His 40 Ser Leu Cys Ala Asp	Lys 25 Asn Ile Tyr Ile Arg 105	10 Glu Gly Val Ile Thr 90 Leu	Phe Asn Ser 75 Lys Ser	Met Tyr Pro 60 Asp His	Ser Thr 45 Glu Val Lys Thr Gln	Ser 30 Cys His Gln Tyr Asp	15 Leu Ile Arg Lys Ser 95 Pro	Gln Ala Phe Glu 80 Gly Ala
	31394 31395 31396 31398 31399 31401 31402 31404 31405 31410 31411 31413 31414 31416 31417	<21: <400 Met 1 Gly Ile Ser Phe 65 Asp Glu Glu	3> OID> SID> Pro Ser Ser Asn 50 Ile Ala Thr Ser	RGANIEQUENT ILE Gly Ser 35 Ala Thr Leu Arg Ile 115	Val 20 Val Ala Tyr Ser Gln 100 Pro	264 Ile 5 Thr Ser Ala His Thr 85 Ser Thr	Thr Ile Leu Thr Gly 70 Tyr Asn Ile	Trp Glu Lys Val 55 Gly Arg Gly Leu	Arg Ser His 40 Ser Leu Cys Ala Asp	Lys 25 Asn Ile Tyr Ile Arg 105 Gly	10 Glu Gly Val Ile Thr 90 Leu Phe	Phe Asn Ser 75 Lys Ser His	Met Tyr Pro 60 Asp His Val Ser	Ser Thr 45 Glu Val Lys Thr Gln 125	Ser 30 Cys His Gln Tyr Asp 110 Glu	15 Leu Ile Arg Lys Ser 95 Pro Val	Gln Ala Phe Glu 80 Gly Ala Trp
	31392 31394 31395 31398 31399 31401 31402 31404 31405 31410 31411 31413 31414 31416 31417 31419	<21: <400 Met 1 Gly Ile Ser Phe 65 Asp Glu Glu Ala	3> OID> SID> SID> SID> SID> SID> SID> SID> S	RGANIEQUENT ILE Gly Ser 35 Ala Thr Leu Arg Ile 115	Val 20 Val Ala Tyr Ser Gln 100 Pro	264 Ile 5 Thr Ser Ala His Thr 85 Ser Thr	Thr Ile Leu Thr Gly 70 Tyr Asn Ile	Trp Glu Lys Val 55 Gly Arg Gly Leu Leu	Arg Ser His 40 Ser Leu Cys Ala Asp	Lys 25 Asn Ile Tyr Ile Arg 105 Gly	10 Glu Gly Val Ile Thr 90 Leu Phe	Phe Asn Ser 75 Lys Ser His	Met Tyr Pro 60 Asp His Val Ser Ser	Ser Thr 45 Glu Val Lys Thr Gln 125	Ser 30 Cys His Gln Tyr Asp 110 Glu	15 Leu Ile Arg Lys Ser 95 Pro Val	Gln Ala Phe Glu 80 Gly Ala Trp
	31392 31394 31395 31398 31399 31401 31402 31404 31405 31410 31411 31413 31414 31416 31417 31419 31420	<21: <400 Met 1 Gly Ile Ser Phe 65 Asp Glu Glu Ala	3> OID> SID> Pro Ser Ser Asn 50 Ile Ala Thr Ser Gly 130	RGANIEQUENT ILE Gly Ser 35 Ala Thr Leu Arg Ile 115 His	ISM: NCE: Arg Val 20 Val Ala Tyr Ser Gln 100 Pro Thr	264 Ile 5 Thr Ser Ala His Thr 85 Ser Thr	Thr Ile Leu Thr Gly 70 Tyr Asn Ile Glu	Trp Glu Lys Val 55 Gly Arg Gly Leu Leu 135	Arg Ser His 40 Ser Leu Cys Ala Asp 120 Pro	Lys 25 Asn Ile Tyr Ile Arg 105 Gly Cys	10 Glu Gly Val Ile Thr 90 Leu Phe	Phe Asn Ser 75 Lys Ser His	Met Tyr Pro 60 Asp His Val Ser Ser 140	Thr 45 Glu Val Lys Thr Gln 125 Gly	Ser 30 Cys His Gln Tyr Asp 110 Glu	15 Leu Ile Arg Lys Ser 95 Pro Val	Gln Ala Phe Glu 80 Gly Ala Trp Ile
	31392 31394 31395 31398 31399 31401 31402 31404 31405 31410 31411 31413 31414 31416 31417 31419 31420 31422	<21: <400 Met 1 Gly Ile Ser Phe 65 Asp Glu Glu Ala Pro	3> OID> SID> Pro Ser Ser Asn 50 Ile Ala Thr Ser Gly 130	RGANIEQUENT ILE Gly Ser 35 Ala Thr Leu Arg Ile 115 His	ISM: NCE: Arg Val 20 Val Ala Tyr Ser Gln 100 Pro Thr	264 Ile 5 Thr Ser Ala His Thr 85 Ser Thr	Thr Ile Leu Thr Gly 70 Tyr Asn Ile Glu Leu	Trp Glu Lys Val 55 Gly Arg Gly Leu Leu 135	Arg Ser His 40 Ser Leu Cys Ala Asp 120 Pro	Lys 25 Asn Ile Tyr Ile Arg 105 Gly Cys	10 Glu Gly Val Ile Thr 90 Leu Phe	Phe Asn Ser 75 Lys Ser His Ala Pro	Met Tyr Pro 60 Asp His Val Ser Ser 140	Thr 45 Glu Val Lys Thr Gln 125 Gly	Ser 30 Cys His Gln Tyr Asp 110 Glu	15 Leu Ile Arg Lys Ser 95 Pro Val	Gln Ala Phe Glu 80 Gly Ala Trp Ile Ser
	31392 31394 31395 31398 31399 31401 31402 31404 31405 31410 31411 31413 31414 31416 31417 31419 31420 31422 31423	<21: <400 Met 1 Gly Ile Ser Phe 65 Asp Glu Glu Ala Pro 145	3> OID> SID> Pro Ser Ser Asn 50 Ile Ala Thr Ser Gly 130 Ala	SEQUENT ILE GLY Ser 35 Ala Thr Leu Arg ILE 115 His ILE	ISM: NCE: Arg Val 20 Val Ala Tyr Ser Gln 100 Pro Thr Arg	264 Ile 5 Thr ser Ala His Thr 85 Ser Thr Val	Thr Ile Leu Thr Gly 70 Tyr Asn Ile Glu Leu 150	Trp Glu Lys Val 55 Gly Arg Gly Leu Leu 135 Lys	Arg Ser His 40 Ser Leu Cys Ala Asp 120 Pro	Lys 25 Asn Ile Tyr Ile Arg 105 Gly Cys	10 Glu Gly Val Ile Thr 90 Leu Phe Thr	Phe Asn Ser 75 Lys Ser His Ala Pro 155	Met Tyr Pro 60 Asp His Val Ser Ser 140 Leu	Ser Thr 45 Glu Val Lys Thr Gln 125 Gly Pro	Ser 30 Cys His Gln Tyr Asp 110 Glu Tyr	15 Leu Ile Arg Lys Ser 95 Pro Val Pro Asp	Gln Ala Phe Glu 80 Gly Ala Trp Ile Ser 160
	31392 31394 31395 31398 31399 31401 31402 31404 31405 31410 31411 31413 31414 31416 31417 31419 31420 31422	<21: <400 Met 1 Gly Ile Ser Phe 65 Asp Glu Glu Ala Pro 145	3> OID> SID> Pro Ser Ser Asn 50 Ile Ala Thr Ser Gly 130 Ala	SEQUENT ILE GLY Ser 35 Ala Thr Leu Arg ILE 115 His ILE	ISM: NCE: Arg Val 20 Val Ala Tyr Ser Gln 100 Pro Thr Arg	264 Ile 5 Thr ser Ala His Thr 85 Ser Thr Val	Thr Ile Leu Thr Gly 70 Tyr Asn Ile Glu Leu 150	Trp Glu Lys Val 55 Gly Arg Gly Leu Leu 135 Lys	Arg Ser His 40 Ser Leu Cys Ala Asp 120 Pro	Lys 25 Asn Ile Tyr Ile Arg 105 Gly Cys	10 Glu Gly Val Ile Thr 90 Leu Phe Thr	Phe Asn Ser 75 Lys Ser His Ala Pro 155	Met Tyr Pro 60 Asp His Val Ser Ser 140 Leu	Ser Thr 45 Glu Val Lys Thr Gln 125 Gly Pro	Ser 30 Cys His Gln Tyr Asp 110 Glu Tyr	15 Leu Ile Arg Lys Ser 95 Pro Val Pro Asp	Gln Ala Phe Glu 80 Gly Ala Trp Ile Ser 160

Input Set : N:\EBONY'S\EP.txt

	31575 31576	Arg	Ala	Gly	Thr	Gly 965	Pro	Ser	Ser	Ser	Glu 970	Ile	Asn	Ala	Thr	Thr 975	Leu
	31578 31579		Asp	Val	Pro 980	Ser	Gln	Pro	Pro	Glu 985	Asn	Val	Arg	Ala	Leu 990	Ser	Ile
	31581	Thr	Ser	Asp	Val	Ala	Val	Ile	Ser	${\tt Trp}$	Ser	Glu	Pro	Pro	Arg	Ser	Thr
E>	31582			995					000					005			
	31584	Leu	Asn	Gly	Val	Leu	Lys	Gly	Tyr	Arg	Val	Ile	Phe	${\tt Trp}$	Ser	Leu	${ t Tyr}$
E>	31585		010					015					020				
	31587	Val	Asp	Gly	Glu	Trp		Glu	Met	Gln	Asn	Ile	Thr	Thr	Thr	Arg	Glu
E>	31588						030					035					040
	31590	Arg	Val	Glu	Leu	-	Gly	Met	Glu	Lys		Thr	Asn	Tyr	Ser		Gln
E>	31591		_		_	045				_	050	_		_		055	_
	31593	Val	Leu	Ala		Thr	Gln	Ala	GLY		GLy	Val	Arg	Ser		Val	Leu
· E>	31594		-1	a 1	060	-	a 1	-	** . 1	065	~ 1	_	_		070	~ 1	_
	31596	Tyr	тте		Inr		GLu	Asp		Pro	GLY	Pro	Pro		GТĀ	TTE	Lys
E>	31597	71.	37 n 1	075	C		7 J -	G	080	**- 1	37- 1	37 a 1	a	085	T	D	D
ъ .	31599	Ald		Pro	ser	ser	Ala		ser	val	Val	vaı		тгр	Leu	Pro	Pro
E/	31600 31602	Thr	090	Dro	λαn	C1 77	Wa 1	095	7 200	Tvc	Пттх	mb ~	100	Dha	Crra	Cor	Cor
F>	31603		пур	PIO	ASII	GTY	110	TIE	Arg	гур	TÄT	1115	116	Pile	Суѕ	ser	120
E>	31605		G1 _V	Ser	G1 _V	Gln		Δla	Dro	Sor	Glu		Glu	Thr	Sar	Dro	
E>	31606	110	СТУ	DET	СТУ	125	FIO	Ата	FIO	SET	130	тут	GIU	1111	Ser	135	Giu
_ ,	31608	Gln	Leu	Phe	Tvr		Tle	Ala	His	Len		Ara	Glv	Gln	Gln		Len
E>	31609	OIII	пси	1 110	140	**** 9	110	711u	1115	145	non	my	OLY	OIII	150	- y -	пси
_ ,	31611	Leu	Trp	Va l		Ala	Va 1	Thr	Ser		Glv	Ara	Glv	Asn		Ser	Glu
E>	31612			155					160		0-1	9		165		001	014
	31614	Lys	Val		Ile	Glu	Pro	Ala		Lvs	Ala	Pro	Ala		Ile	Ile	Ser
E>	31615		170					175	1	4		-	180	4 -			
	31617	Phe	Gly	Gly	Thr	Val	Thr	Thr	Pro	Trp	Met	Lys	Asp	Val	Arg	Leu	Pro
E>	31618						190			_		195	_		-		200
	31620	Cys	Asn	Ser	Val	Gly	Asp	${\tt Pro}$	Ala	Pro	Ala	Val	Lys	Trp	Thr	Lys	Asp
E>	31621					205					210					215	
	31623	Ser	Glu	Asp	Ser	Ala	Ile	Pro	Val	Ser	Met	Asp	Gly	His	Arg	Leu	Ile
E>	31624				220					225					230		
	31626	His	Thr		Gly	Thr	Leu	Leu		Arg	Ala	Val	Lys	Ala	Glu	Asp	Ser
E>	31627			235					240			_		245			
	31629	Gly	-	Tyr	Thr	Cys	Thr		Thr	Asn	Thr	Gly	-	Phe	Asp	Thr	Ile
E>	31630		250	_	_	_	1	255		_	_	_	260	_	_	_	_1
	31632		vaı	Asn	Leu	Leu		GIn	Val	Pro	Pro	_	GIn	Pro	Arg	Leu	
E>	31633			T	m 1	a	270	a	a	-1 -	m1	275	m1	m	~1 -	D	280
Б.	31635	val	ser	тĀR	THE		Ala	ser	ser	TTE		Leu	Thr	тгр	шe		GTĀ
E/	31636	λαń	ħ a n	C111	C1 11	285	Cor	т1 о	7 ma	C1	290	17 a 1	T 011	Cln	Шттт	295	17-1
F>	31638 31639	ASP	ASII	СТА	300	ser	ser	тте	Arg	305	Phe	Val	Leu	GIII	310	ser	val
E/	31641	λαη	λan	Sor		Clu	Ψrn	Tvc	λan		Dho	т1 о	Cor	Cor		C111	λκα
E>	31642	vah	MOII	315	JIU	σ±u	11P	чÃэ	320	val	FIIC	TTG	261	325	Ser	GLU	AIG
٠- ر	31644	Ser	Phe		T.e.n	Asn	Ser	Leu		Cve	Glv	Thr	Trn		Lvc	Val	Lve
E>	31645	J 01	330			-105	501	335	~, ~	J J J	0±1		340	-1-	-10	, u T	-,3
	31647	Leu		Ala	Lys	Asn	Ser		Gly	Ser	Gly	Arq		Ser	Glu	Ile	Ile
					_				_		_	_					

Input Set : N:\EBONY'S\EP.txt

	31722		Thr	Ser	Met	Ser		Pro	Ser	Glu	Pro		Ile	Cys	Arg	Phe	
E>	31723 31725		Ser	Pro	Pro	Lvs	750	Gln	Asn	Δla	Asn	755	Glv	T.vs	Δsn	Val	760 ∆1a
E>	31726		001	1 2 0		765		01	op	1124	770	1119	GLY	275	21511	775	niu
	31728	Val	Pro	Ile	Pro	His	Arg	Ala	Asn	Lys	Ser	Asp	Tyr	Cys	Asn		Pro
E>	31729				780		_			785		-	-	-	790		
	31731	Leu	Tyr	Ala	Lys	Ser	Glu	Ala	Phe	Phe	Arg	Lys	Ala	Asp	Gly	Arg	Glu
E>	31732			795					800					805			
	31734	Pro		Pro	Val	Val	Pro		Arg	Glu	Ala	Ser	Ile	Arg	Asn	Leu	Ala
E>	31735		810					815					820				
	31737		Thr	Tyr	His	Thr		Ala	Arg	His	Leu		Leu	Asp	Pro	Ala	
E>	31738		a	T	a 1	T	830	TT 2 -		a 1		835	- 1 -			~	840
TP \	31740	Lys	ser	Leu	GIY		Pro	HIS	Pro	GIY		Pro	Ата	Ата	Ala		Thr
E/	31741	λla	Thr.	T 011	Dro	845	λνα	Пhт	T 011	71-	850	Dwo	71.	Dwo	Dwa	855	G1
F>	31743 31744	нта	1111	ьец	860	GIII	AIG	TIIT	Leu	865	Met	PIO	Ата	PLO		Ala	СТА
	31746	Thr	Δla	Pro		Δla	Pro	Gl v	Dro		Dro	λla	Glu	Dro	870 Bro	Пhr	7.15
E>	31747	1111	mu	875	ب	71.L.U	110	Gry	880	1111	rio	Ата	Gru	885	FIO	1111	Ата
	31749	Pro	Ser		Ala	Pro	Pro	Ala		Ser	Thr	Glu	Pro		Ara	Ala	Glv
E>	31750		890					895				014	900	110	9	1114	011
	31752	Gly		His	Thr	Lys	Met		Gly	Ser	Arg	Asp		Leu	Leu	Glu	Met
E>	31753					-	910	-	-		,	915					920
	31755	Ser	Thr	Ser	Gly	Val	Gly	Arg	Ser	Gln	Lys	Gln	Gly	Ala	Gly	Ala	Tyr
E>	31756					925					930		_		_	935	-
	31758	Ser	Lys	Ser	Tyr	Thr	Leu	Val									
E>	31759				940												
	32274						5										
	32275					808											
•	32276																
	32277	<21		רוא אים כ	CM.												
							sap	piens	5								
	32279	<400)> SI	EQUE	ICE:	266				_		~ 1					_
	32280	<400 Met)> SI	EQUE	ICE:	266 Ile				Lys		Gly	Gln	Val	Ile		Ser
	32280 32281	<400 Met)> SI Pro	EQUEN Ile	NCE: Arg	266 Ile 5	Thr	Trp	Arg		10					15	
	32280 32281 32283	<400 Met)> SI Pro	EQUEN Ile	NCE: Arg Val	266 Ile 5	Thr	Trp	Arg	Lys	10				Ser	15	
	32280 32281 32283 32284	<400 Met 1 Gly)> SI Pro Ser	EQUEN Ile Gly	NCE: Arg Val 20	266 Ile 5 Thr	Thr Ile	Trp Glu	Arg Ser	Lys 25	10 Glu	Phe	Met	Ser	Ser 30	15 Leu	Gln
	32280 32281 32283 32284 32286	<400 Met 1 Gly)> SI Pro Ser	EQUEN Ile Gly Ser	NCE: Arg Val 20	266 Ile 5 Thr	Thr Ile	Trp Glu	Arg Ser His	Lys 25	10 Glu	Phe	Met	Ser Thr	Ser 30	15 Leu	Gln
	32280 32281 32283 32284 32286 32287	<400 Met 1 Gly Ile)> SI Pro Ser Ser	EQUEN Ile Gly Ser 35	Val 20 Val	266 Ile 5 Thr	Thr Ile Leu	Trp Glu Lys	Arg Ser His 40	Lys 25 Asn	10 Glu Gly	Phe Asn	Met Tyr	Ser Thr 45	Ser 30 Cys	15 Leu Ile	Gln Ala
	32280 32281 32283 32284 32286	<400 Met 1 Gly Ile)> SI Pro Ser Ser	EQUEN Ile Gly Ser 35	Val 20 Val	266 Ile 5 Thr	Thr Ile Leu	Trp Glu Lys	Arg Ser His 40	Lys 25 Asn	10 Glu Gly	Phe Asn	Met Tyr Pro	Ser Thr 45	Ser 30 Cys	15 Leu Ile	Gln Ala
	32281 32283 32284 32286 32287 32289 32290	<400 Met 1 Gly Ile Ser	> SI Pro Ser Ser Asn 50	EQUEN Ile Gly Ser 35 Ala	Val 20 Val Ala	266 Ile 5 Thr Ser	Thr Ile Leu Thr	Trp Glu Lys Val 55	Arg Ser His 40 Ser	Lys 25 Asn Ile	10 Glu Gly Val	Phe Asn Ser	Met Tyr Pro 60	Ser Thr 45 Glu	Ser 30 Cys His	15 Leu Ile Arg	Gln Ala Phe
	32280 32281 32283 32284 32286 32287 32289	<400 Met 1 Gly Ile Ser	> SI Pro Ser Ser Asn 50	EQUEN Ile Gly Ser 35 Ala	Val 20 Val Ala	266 Ile 5 Thr Ser	Thr Ile Leu Thr	Trp Glu Lys Val 55	Arg Ser His 40 Ser	Lys 25 Asn Ile	10 Glu Gly Val	Phe Asn Ser	Met Tyr Pro 60	Ser Thr 45 Glu	Ser 30 Cys His	15 Leu Ile Arg	Gln Ala Phe
	32281 32281 32283 32284 32286 32287 32289 32290 32292	<400 Met 1 Gly Ile Ser Phe 65	Pro Ser Ser Asn 50 Ile	EQUENT Ile Gly Ser 35 Ala Thr	Val 20 Val Ala	266 Ile 5 Thr Ser Ala	Thr Ile Leu Thr Gly 70	Trp Glu Lys Val 55 Gly	Arg Ser His 40 Ser Leu	Lys 25 Asn Ile Tyr	10 Glu Gly Val Ile	Phe Asn Ser Ser 75	Met Tyr Pro 60 Asp	Ser Thr 45 Glu Val	Ser 30 Cys His	15 Leu Ile Arg Lys	Gln Ala Phe Glu 80
	32280 32281 32284 32286 32287 32289 32290 32292 32293 32295 32296	<400 Met 1 Gly Ile Ser Phe 65 Asp	Pro Ser Ser Asn 50 Ile Ala	EQUENT Ile Gly Ser 35 Ala Thr	Val 20 Val Ala Tyr	266 Ile 5 Thr Ser Ala His Thr 85	Thr Ile Leu Thr Gly 70 Tyr	Trp Glu Lys Val 55 Gly Arg	Arg Ser His 40 Ser Leu Cys	Lys 25 Asn Ile Tyr	10 Glu Gly Val Ile Thr 90	Phe Asn Ser Ser 75 Lys	Met Tyr Pro 60 Asp	Ser Thr 45 Glu Val Lys	Ser 30 Cys His Gln	15 Leu Ile Arg Lys Ser 95	Gln Ala Phe Glu 80 Gly
	32280 32281 32283 32284 32286 32287 32289 32290 32292 32293 32295 32296 32298	<400 Met 1 Gly Ile Ser Phe 65 Asp	Pro Ser Ser Asn 50 Ile Ala	EQUENT Ile Gly Ser 35 Ala Thr	Val 20 Val Ala Tyr Ser	266 Ile 5 Thr Ser Ala His Thr 85	Thr Ile Leu Thr Gly 70 Tyr	Trp Glu Lys Val 55 Gly Arg	Arg Ser His 40 Ser Leu Cys	Lys 25 Asn Ile Tyr	10 Glu Gly Val Ile Thr 90	Phe Asn Ser Ser 75 Lys	Met Tyr Pro 60 Asp	Ser Thr 45 Glu Val Lys	Ser 30 Cys His Gln	15 Leu Ile Arg Lys Ser 95	Gln Ala Phe Glu 80 Gly
	32280 32281 32283 32284 32286 32287 32289 32290 32292 32293 32295 32296 32298 32299	<400 Met 1 Gly Ile Ser Phe 65 Asp	Pro Ser Ser Asn 50 Ile Ala	EQUENT Ile Gly Ser 35 Ala Thr Leu Arg	Val 20 Val Ala Tyr Ser Gln 100	266 Ile 5 Thr Ser Ala His Thr 85 Ser	Thr Ile Leu Thr Gly 70 Tyr Asn	Trp Glu Lys Val 55 Gly Arg Gly	Arg Ser His 40 Ser Leu Cys	Lys 25 Asn Ile Tyr Ile Arg 105	10 Glu Gly Val Ile Thr 90 Leu	Phe Asn Ser Ser 75 Lys Ser	Met Tyr Pro 60 Asp His	Ser Thr 45 Glu Val Lys Thr	Ser 30 Cys His Gln Tyr Asp	15 Leu Ile Arg Lys Ser 95 Pro	Gln Ala Phe Glu 80 Gly Ala
	32280 32281 32283 32284 32286 32287 32289 32290 32292 32293 32295 32296 32298 32299 32301	<400 Met 1 Gly Ile Ser Phe 65 Asp	Pro Ser Ser Asn 50 Ile Ala	EQUENT ITE Gly Ser 35 Ala Thr Leu Arg	Val 20 Val Ala Tyr Ser Gln 100	266 Ile 5 Thr Ser Ala His Thr 85 Ser	Thr Ile Leu Thr Gly 70 Tyr Asn	Trp Glu Lys Val 55 Gly Arg Gly	Arg Ser His 40 Ser Leu Cys Ala Asp	Lys 25 Asn Ile Tyr Ile Arg 105	10 Glu Gly Val Ile Thr 90 Leu	Phe Asn Ser Ser 75 Lys Ser	Met Tyr Pro 60 Asp His	Ser Thr 45 Glu Val Lys Thr Gln	Ser 30 Cys His Gln Tyr Asp	15 Leu Ile Arg Lys Ser 95 Pro	Gln Ala Phe Glu 80 Gly Ala
	32280 32281 32283 32284 32286 32287 32289 32290 32292 32293 32296 32298 32299 32301 32302	<400 Met 1 Gly Ile Ser Phe 65 Asp Glu Glu	Pro Ser Ser Asn 50 Ile Ala Thr Ser	EQUENT ITE Gly Ser 35 Ala Thr Leu Arg ITE 115	Val 20 Val Ala Tyr Ser Gln 100 Pro	266 Ile 5 Thr Ser Ala His Thr 85 Ser Thr	Thr Ile Leu Thr Gly 70 Tyr Asn Ile	Trp Glu Lys Val 55 Gly Arg Gly Leu	Arg Ser His 40 Ser Leu Cys Ala Asp	Lys 25 Asn Ile Tyr Ile Arg 105 Gly	10 Glu Gly Val Ile Thr 90 Leu	Phe Asn Ser 75 Lys Ser His	Met Tyr Pro 60 Asp His Val Ser	Ser Thr 45 Glu Val Lys Thr Gln 125	Ser 30 Cys His Gln Tyr Asp 110 Glu	15 Leu Ile Arg Lys Ser 95 Pro Val	Gln Ala Phe Glu 80 Gly Ala Trp
	32280 32281 32284 32286 32287 32289 32290 32292 32293 32295 32298 32298 32299 32301 32302 32304	<400 Met 1 Gly Ile Ser Phe 65 Asp Glu Glu	Ser Ser Asn 50 Ile Ala Thr Ser Gly	EQUENT ITE Gly Ser 35 Ala Thr Leu Arg ITE 115	Val 20 Val Ala Tyr Ser Gln 100 Pro	266 Ile 5 Thr Ser Ala His Thr 85 Ser Thr	Thr Ile Leu Thr Gly 70 Tyr Asn Ile	Trp Glu Lys Val 55 Gly Arg Gly Leu Leu	Arg Ser His 40 Ser Leu Cys Ala Asp	Lys 25 Asn Ile Tyr Ile Arg 105 Gly	10 Glu Gly Val Ile Thr 90 Leu	Phe Asn Ser 75 Lys Ser His	Met Tyr Pro 60 Asp His Val Ser	Ser Thr 45 Glu Val Lys Thr Gln 125	Ser 30 Cys His Gln Tyr Asp 110 Glu	15 Leu Ile Arg Lys Ser 95 Pro Val	Gln Ala Phe Glu 80 Gly Ala Trp
	32280 32281 32283 32284 32286 32287 32289 32290 32292 32293 32296 32298 32299 32301 32302	<400 Met 1 Gly Ile Ser Phe 65 Asp Glu Glu)> SI Pro Ser Ser Asn 50 Ile Ala Thr	EQUENT ITE Gly Ser 35 Ala Thr Leu Arg ITE 115	Val 20 Val Ala Tyr Ser Gln 100 Pro	266 Ile 5 Thr Ser Ala His Thr 85 Ser Thr	Thr Ile Leu Thr Gly 70 Tyr Asn Ile	Trp Glu Lys Val 55 Gly Arg Gly Leu	Arg Ser His 40 Ser Leu Cys Ala Asp	Lys 25 Asn Ile Tyr Ile Arg 105 Gly	10 Glu Gly Val Ile Thr 90 Leu	Phe Asn Ser 75 Lys Ser His	Met Tyr Pro 60 Asp His Val Ser	Ser Thr 45 Glu Val Lys Thr Gln 125	Ser 30 Cys His Gln Tyr Asp 110 Glu	15 Leu Ile Arg Lys Ser 95 Pro Val	Gln Ala Phe Glu 80 Gly Ala Trp

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/092,900

DATE: 11/01/2002
TIME: 12:24:31

Input Set : N:\EBONY'S\EP.txt

	32454	Ser		Val	Tyr	Thr	Leu		Asn	Leu	Lys	Lys		Ala	Gln	Tyr	Gly
	32455 32457	37 o 1	930	Wa 1	Cln	λla	Dho	935	λνα	Δla	Glv	Thr	940	Pro	Ser	Ser	Ser
	32457		vaı	Val	GIII	Ата	950	ASII	лгу	ΛIα	GLY	955	GLY	110	DCI	001	960
	32460		Ile	Asn	Ala	Thr		Leu	Glu	Asp	Val		Ser	Gln	Pro	Pro	Glu
	32461					965					970					975	
	32463	Asn	Val	Arg	Ala	Leu	Ser	Ile	\mathtt{Thr}	Ser	Asp	Val	Ala	Val		Ser	\mathtt{Trp}
	32464				980					985					990		
	32466	ser	Glu		Pro	Arg	Ser	Thr		Asn	Gly	Val	Leu		Gly	Tyr	Arg
E>	32467	_		995	_	_	_	_	000		a 1	a 1	m	005	01	Mat	<i>0</i> 15
	32469	Val		Phe	Trp	Ser	Leu		vaı	Asp	GIY	GIU	020	СТА	GIU	мес	GIII
E>	32470 32472	3 ~~	010	mh w	mb∽	mh n	7 200	015	λνα	W = 1	Clu	T.OU		G1 v	Mot	G111	T.vs
E \	32472 32473		TIE	1111	1111	1111	030	GIU	AIG	VUI	Giu	035	nrg	OLY	nec	014	040
E/	32475		Thr	Δen	тиг	Ser		Gln	Va1	Len	Ala		Thr	Gln	Ala	Glv	
F>	32475	riic	1111	ASII	1 Y 1	045	141	0111	, u _	Lou	050	-1-				055	
_ ,	32478	Glv	Val	Arq	Ser		Val	Leu	Tyr	Ile	Gln	Thr	Lys	Glu	Asp	Val	Pro
E>	32479	1		5	060				-	065			_		070		
	32481	Gly	Pro	Pro	Ala	Gly	Ile	Lys	Ala	Val	Pro	Ser	Ser	Ala	Ser	Ser	Val
E>	32482			075					080					085			
	32484	Val	Val	Ser	${\tt Trp}$	Leu	Pro	Pro	Thr	Lys	Pro	Asn		Val	Ile	Arg	Lys
E>	32485		090	_				095	_		_		100	_	_	a 1.	
	32487		Thr	Ile	Phe	Cys		Ser	Pro	Ala	Pro		Ala	Pro	Ser	GIu	
E>	32488	105	m1	a	D	a 1	110	T	Dha	m	7	115	7.1.	II i o	LOU	λαn	120
	32490	GIU	Thr	ser	PLO	125	GIII	ьeu	Pile	TÄT	130	116	Ата	птъ	neu	135	AIG
E>	32491 32493	C1 v	Gln	Gln	ጥህጕ		Len	Trn	Va 1	Δla		Va 1	Thr	Ser	Ala		Arg
E>	32494	GIY	GIII	GIII	140	LCu	пси	++P	,	145		, 41			150	1	J
ь,	32496	Glv	Asn	Ser		Glu	Lys	Val	Thr		Glu	Pro	Ala	Gly	Lys	Ala	Pro
E>	32497			155					160					165			
	32499	Ala	Lys	Ile	Ile	Ser	Phe	Gly	Gly	Thr	Val	Thr	Thr	Pro	${\tt Trp}$	Met	Lys
E>	32500		170					175					180			_	_
	32502		Val	Arg	Leu	Pro		Asn	Ser	Val	Gly		Pro	Ala	Pro	Ala	
E>	32503		_	_,	_		190	01	3	a	21.	195	Dwo	17-1	Com	Mot	200
	32505	Lys	Trp	Thr	Lys		ser	GIU	Asp	ser		тте	PIO	Val	ser	215	ASP
E>	32506 32508	C1.,	IIi a	λνα	T OU	205	Uic	Thr	λen	Glv	210 Thr	T.@11	T.e.11	Leu	Δrσ		Va1
E>	32509	GTÄ	птъ	AIG	220	116	птэ	1111	USII	225	1111	пси	LCu	пси	230	1114	, 41
F>	32511	Lvs	Ala	Glu		Ser	Glv	Tvr	Tvr		Cvs	Thr	Ala	Thr		Thr	Gly
E>	32512													245			_
_	32514												Gln	Val	Pro	Pro	Asp
E>	32515	_	250					255					260				
	32517	Gln	Pro	Arg	Leu	Thr	Val	Ser	Lys	Thr	Ser		Ser	Ser	Ile	Thr	
E>	32518	265					270			_		275					280
	32520	Thr	${\tt Trp}$	Ile	Pro		Asp	Asn	Gly	Gly		Ser	Ile	Arg	GLy		
E>	32521	.	a 3	m. :	0	285	3	7 ~~	0	G1	290	m	T ++-	λ c.~	17 n 1	295	
	32523	Leu	GIn	туг		vaı	ASP	ASN	ser	305	GIU	ттр	тАг	ASP	310	FIIG	TTE
E>	32524 32526	Sor	Sor	Ser	300 Glu	Δτα	Ser	Pho	Lve		Asn	Ser	Len	Lvs		G1 v	Thr
	JZJZ0	SeT	Set	SCI	GIU	птд	2CT	rue	шуз	Leu	1125	UCI	u	-13	0,10	1	

Input Set : N:\EBONY'S\EP.txt

	32601		Phe		Ser	Asp	Ser	Ser		Asp	Gln	Met	Thr		Gly	Thr	Asn
E>	32602		_	715	_	_			720					725			
	32604			Ala	Asp	Ser	Met		Ser	Met	Ser	Thr		Ser	Glu	Pro	Gly
E>	32605		730		_	_	_	735					740				
	32607		Cys	Arg	Phe	Thr		Ser	Pro	Pro	Lys		Gln	Asp	Ala	Asp	Arg
E>	32608						750					755					760
	32610	Leu	Leu	Met	Leu		Pro	Gly	Ala	His		Pro	Pro	Gln	Ser	Ile	His
E>	32611					765					770					775	
	32613	Val	Val	Ala		Val	Arg	Ile	Ser		Leu	Leu	Asn	Lys	Gly	Gly	Gly
E>	32614				780					785					790		
	32616	Asp	Leu	Ala	Ser	Asp	Leu	Ser		Gly	Arg	Ala	Cys	Ser	Glu	Pro	Arg
E>	32617			795					800					805			
	32619	Ser		Gly	Thr	Arg	Pro		Thr	Leu	Val	Ala	Leu	Thr	Pro	Ser	Ser
E>	32620		810					815					820				
	32622	Ser	Thr	Cys	Glu	Ala	Gly	Asp	Pro	Arg	Trp	Gly	Gln	Gly	Trp	Arg	Lys
E>	32623						830					835					840
	32625	Gly	Arg	Asp	Ser	Ile	Met	Arg	Glu	Gly	His	Arg	Met	Glu	Glu	Ala	Lys
E>	32626					845					850					855	
	32628	Pro	Arg	Glu	Arg	Gln	Thr	Ser	Gly	Glu	Thr	Glu	Val	His	Met	Glu	Gly
E>	32629				860					865					870		
	32631	Glu	Ala	Gly	Glu	Leu	Gly	Ser	Gly	Ser	Gly	Ser	Glu	Gly	Val	Gly	Glu
E>	32632			875					880					885			
	32634	Pro	Ala	Pro	Ser	Arg	His	Gly	Gly	Thr	Pro	His	Thr	Pro	Ser	Gln	Gly
E>	32635		890					895					900				
	32637	Pro	Pro	Leu	Cys												
E>	32638	905			-												
E>	32638 32757	905 <21)> SI	EQ II	NO:		3										
E>	32638 32757 32758	905 <210 <211)> SI l> LI	EQ II	NO:		3										
E>	32638 32757 32758 32759	905 <210 <211 <212)> SI L> LI 2> TY	EQ II ENGTH (PE:	NO: 1: 4()5											
E>	32638 32757 32758 32759 32760	905 <210 <211 <212 <213)> SI L> LE 2> TY 3> OF	EQ II ENGTH (PE: RGAN)	NO: H: 4(PRT)5 Homo		oiens	3								
E>	32638 32757 32758 32759 32760 32762	905 <210 <211 <213 <213 <400)> SI L> LE 2> TY 3> OF	EQ II ENGTH (PE: RGAN) EQUEN	O NO: H: 40 PRT ISM: NCE:)5 Homo 268	sap										
E>	32638 32757 32758 32759 32760 32762 32763	905 <210 <211 <213 <400 Met)> SI L> LE 2> TY 3> OF	EQ II ENGTH (PE: RGAN) EQUEN	O NO: H: 40 PRT ISM: NCE:	Homo 268 Leu	sap			Leu	Pro	His	Thr	Tyr	Pro	Pro	His
E>	32638 32757 32758 32759 32760 32762 32763 32764	905 <210 <211 <213 <400 Met)> SI l> LI 2> TY 3> OI)> SI Gln	EQ II ENGTH (PE: RGAN) EQUEN Glu	NO: H: 4(PRT ISM: NCE: Val	Homo 268 Leu 5	sar Cys	Lys	Tyr		10			-		15	
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766	905 <210 <211 <213 <400 Met)> SI l> LI 2> TY 3> OI)> SI Gln	EQ II ENGTH (PE: RGAN) EQUEN Glu	NO: H: 4(PRT ISM: NCE: Val	Homo 268 Leu 5	sar Cys	Lys	Tyr		10			-		15	
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767	905 <210 <211 <211 <400 Met 1)> SI l> LH 2> TY 3> OH)> SH Gln	EQ II ENGTH YPE: RGANI EQUEN Glu Pro	PRT ISM: NCE: Val	Homo 268 Leu 5 His	sar Cys Thr	Lys Tyr	Tyr Pro	Pro 25	10 His	Thr	Tyr	Leu	Pro 30	15 Cys	Pro
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767 32769	905 <210 <211 <211 <400 Met 1)> SI l> LH 2> TY 3> OH)> SH Gln	EQ II ENGTH (PE: RGANI EQUEN Glu Pro	PRT ISM: NCE: Val	Homo 268 Leu 5 His	sar Cys Thr	Lys Tyr	Tyr Pro	Pro 25	10 His	Thr	Tyr	Leu	Pro 30	15 Cys	Pro
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767 32769 32770	905 <210 <211 <213 <400 Met 1 Thr	0> SH 1> LH 2> TY 3> OH 0> SH Gln Tyr Leu	EQ II ENGTH (PE: RGANI EQUEN Glu Pro Pro 35	PRT ISM: Val	Homo 268 Leu 5 His	o sar Cys Thr Tyr	Lys Tyr Leu	Tyr Pro Pro 40	Pro 25 Arg	10 His Pro	Thr Tyr	Tyr Leu	Leu Pro 45	Pro 30 Pro	15 Cys Thr	Pro Tyr
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767 32769 32770 32772	905 <210 <211 <213 <400 Met 1 Thr	O> SI L> LE 2> TY B> OF Gln Tyr Leu Pro	EQ II ENGTH (PE: RGANI EQUEN Glu Pro Pro 35	PRT ISM: Val	Homo 268 Leu 5 His	o sar Cys Thr Tyr	Lys Tyr Leu Pro	Tyr Pro Pro 40	Pro 25 Arg	10 His Pro	Thr Tyr	Tyr Leu	Leu Pro 45	Pro 30 Pro	15 Cys Thr	Pro Tyr
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767 32769 32770 32772 32773	905 <210 <211 <211 <400 Met 1 Thr Tyr	0> SI 1> LH 2> TY 3> OF 0> SI Gln Tyr Leu Pro 50	EQ II ENGTH YPE: RGANJ EQUEN Glu Pro Pro 35 Arg	PRT (SM: Val Pro 20 Pro Pro	Homo 268 Leu 5 His Thr	Cys Thr Tyr Leu	Lys Tyr Leu Pro 55	Tyr Pro Pro 40 Pro	Pro 25 Arg Thr	10 His Pro Tyr	Thr Tyr Leu	Tyr Leu Leu 60	Leu Pro 45 Cys	Pro 30 Pro Leu	15 Cys Thr Tyr	Pro Tyr Leu
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767 32769 32770 32772 32773 32775	905 <210 <211 <211 <400 Met 1 Thr Tyr Leu	0> SI 1> LH 2> TY 3> OF 0> SI Gln Tyr Leu Pro 50	EQ II ENGTH YPE: RGANJ EQUEN Glu Pro Pro 35 Arg	PRT (SM: Val Pro 20 Pro Pro	Homo 268 Leu 5 His Thr	Cys Thr Tyr Leu Pro	Lys Tyr Leu Pro 55	Tyr Pro Pro 40 Pro	Pro 25 Arg Thr	10 His Pro Tyr	Thr Tyr Leu Ala	Tyr Leu Leu 60	Leu Pro 45 Cys	Pro 30 Pro Leu	15 Cys Thr Tyr	Pro Tyr Leu Pro
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767 32769 32770 32772 32773 32775 32776	905 <210 <211 <211 <400 Met 1 Thr Tyr Leu	D> SI L> LE 2> TY 3> OF Gln Tyr Leu Pro 50 Leu	EQ II ENGTH YPE: RGANI EQUEN Glu Pro Pro 35 Arg Gly	PRT (SM: Val Pro 20 Pro Leu	Homo 268 Leu 5 His Thr Tyr	Cys Thr Tyr Leu Pro 70	Lys Tyr Leu Pro 55 Cys	Tyr Pro Pro 40 Pro Phe	Pro 25 Arg Thr	10 His Pro Tyr Ala	Thr Tyr Leu Ala 75	Tyr Leu Leu 60 Gln	Leu Pro 45 Cys Ser	Pro 30 Pro Leu Leu	15 Cys Thr Tyr Pro	Pro Tyr Leu Pro 80
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767 32770 32772 32773 32775 32776 32778	905 <210 <211 <211 <400 Met 1 Thr Tyr Leu	D> SI L> LE 2> TY 3> OF Gln Tyr Leu Pro 50 Leu	EQ II ENGTH YPE: RGANI EQUEN Glu Pro Pro 35 Arg Gly	PRT (SM: Val Pro 20 Pro Leu	Homo 268 Leu 5 His Thr Tyr	Cys Thr Tyr Leu Pro 70	Lys Tyr Leu Pro 55 Cys	Tyr Pro Pro 40 Pro Phe	Pro 25 Arg Thr	10 His Pro Tyr Ala Ala	Thr Tyr Leu Ala 75	Tyr Leu Leu 60 Gln	Leu Pro 45 Cys Ser	Pro 30 Pro Leu Leu	15 Cys Thr Tyr Pro Met	Pro Tyr Leu Pro 80
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767 32770 32772 32773 32775 32776 32778 32778	905 <210 <211 <211 <400 Met 1 Thr Tyr Leu Trp 65 Pro	D> SI L> LE 2> TY 3> OF Gln Tyr Leu Pro 50 Leu	EQ II ENGTH YPE: RGANI EQUEN Glu Pro 35 Arg Gly Gln	PRT (SM: Val Pro 20 Pro Leu Ser	Homo 268 Leu 5 His Thr Tyr Trp Gly 85	Cys Thr Tyr Leu Pro 70 Gly	Lys Tyr Leu Pro 55 Cys Gly	Tyr Pro Pro 40 Pro Phe Ser	Pro 25 Arg Thr Leu	10 His Pro Tyr Ala Ala 90	Thr Tyr Leu Ala 75 Ser	Tyr Leu Leu 60 Gln Arg	Leu Pro 45 Cys Ser	Pro 30 Pro Leu Leu Pro	15 Cys Thr Tyr Pro Met 95	Pro Tyr Leu Pro 80 Leu
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767 32770 32772 32773 32775 32776 32778 32778 32779 32779	905 <210 <211 <211 <400 Met 1 Thr Tyr Leu Trp 65 Pro	D> SI L> LE 2> TY 3> OF Gln Tyr Leu Pro 50 Leu	EQ II ENGTH YPE: RGANI EQUEN Glu Pro 35 Arg Gly Gln	PRT (SM: Val Pro 20 Pro Leu Ser Leu	Homo 268 Leu 5 His Thr Tyr Trp Gly 85	Cys Thr Tyr Leu Pro 70 Gly	Lys Tyr Leu Pro 55 Cys Gly	Tyr Pro Pro 40 Pro Phe Ser	Pro 25 Arg Thr Leu Arg	10 His Pro Tyr Ala Ala 90	Thr Tyr Leu Ala 75 Ser	Tyr Leu Leu 60 Gln Arg	Leu Pro 45 Cys Ser	Pro 30 Pro Leu Leu Pro	15 Cys Thr Tyr Pro Met 95	Pro Tyr Leu Pro 80 Leu
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767 32770 32772 32773 32775 32776 32778 32778 32778 32778 32778	905 <210 <211 <211 <400 Met 1 Thr Tyr Leu Trp 65 Pro	O> SI L> LE 2> TY 3> OF O> SI Gln Tyr Leu Pro 50 Leu Leu	EQ II ENGTH YPE: RGANI EQUEN Glu Pro 35 Arg Gly Gln Ala	PRT (SM: Val Pro 20 Pro Leu Ser Leu 100	Homo 268 Leu 5 His Thr Tyr Trp Gly 85 Val	Cys Thr Tyr Leu Pro 70 Gly Leu	Lys Tyr Leu Pro 55 Cys Gly Gly	Tyr Pro 40 Pro Phe Ser Ala	Pro 25 Arg Thr Leu Arg Tyr 105	10 His Pro Tyr Ala Ala 90 Cys	Thr Tyr Leu Ala 75 Ser Leu	Tyr Leu 60 Gln Arg	Leu Pro 45 Cys Ser Ala	Pro 30 Pro Leu Leu Pro Leu 110	15 Cys Thr Tyr Pro Met 95 Pro	Pro Tyr Leu Pro 80 Leu Gly
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767 32770 32772 32773 32775 32776 32778 32778 32778 32781 32782 32784	905 <210 <211 <211 <400 Met 1 Thr Tyr Leu Trp 65 Pro	O> SI L> LE 2> TY 3> OF O> SI Gln Tyr Leu Pro 50 Leu Leu	EQ II ENGTH YPE: RGANI EQUEN Glu Pro 35 Arg Gly Gln Ala Pro	PRT (SM: Val Pro 20 Pro Leu Ser Leu 100	Homo 268 Leu 5 His Thr Tyr Trp Gly 85 Val	Cys Thr Tyr Leu Pro 70 Gly Leu	Lys Tyr Leu Pro 55 Cys Gly Gly	Tyr Pro 40 Pro Phe Ser Ala Ala	Pro 25 Arg Thr Leu Arg Tyr 105	10 His Pro Tyr Ala Ala 90 Cys	Thr Tyr Leu Ala 75 Ser Leu	Tyr Leu 60 Gln Arg	Leu Pro 45 Cys Ser Ala Ala Pro	Pro 30 Pro Leu Leu Pro Leu 110	15 Cys Thr Tyr Pro Met 95 Pro	Pro Tyr Leu Pro 80 Leu Gly
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767 32770 32772 32773 32775 32776 32778 32778 32778 32781 32782 32784 32785	905 <210 <211 <211 <400 Met 1 Thr Tyr Leu Trp 65 Pro Leu Arg	O> SI L> LE 2> TY 3> OF Gln Tyr Leu Pro 50 Leu Leu Val	EQ II ENGTH YPE: RGANI EQUEN Glu Pro 35 Arg Gly Gln Ala Pro 115	PRT (SM: Val Pro 20 Pro Leu Ser Leu 100 Pro	Homo 268 Leu 5 His Thr Tyr Gly 85 Val	Cys Thr Tyr Leu Pro 70 Gly Leu Ala	Lys Tyr Leu Pro 55 Cys Gly Gly Arg	Tyr Pro 40 Pro Phe Ser Ala Ala 120	Pro 25 Arg Thr Leu Arg Tyr 105 Pro	10 His Pro Tyr Ala Ala 90 Cys	Thr Tyr Leu Ala 75 Ser Leu Pro	Tyr Leu 60 Gln Arg Cys Ala	Leu Pro 45 Cys Ser Ala Ala Pro 125	Pro 30 Pro Leu Leu Pro Leu 110 Ala	15 Cys Thr Tyr Pro Met 95 Pro	Pro Tyr Leu Pro 80 Leu Gly Ser
E>	32638 32757 32758 32759 32760 32762 32763 32764 32766 32767 32770 32772 32773 32775 32776 32778 32778 32778 32781 32782 32784	905 <210 <211 <211 <400 Met 1 Thr Tyr Leu Trp 65 Pro Leu Arg	O> SI L> LE 2> TY 3> OF Gln Tyr Leu Pro 50 Leu Leu Val	EQ II ENGTH YPE: RGANI EQUEN Glu Pro 35 Arg Gly Gln Ala Pro 115	PRT (SM: Val Pro 20 Pro Leu Ser Leu 100 Pro	Homo 268 Leu 5 His Thr Tyr Gly 85 Val	Cys Thr Tyr Leu Pro 70 Gly Leu Ala	Lys Tyr Leu Pro 55 Cys Gly Gly Arg	Tyr Pro 40 Pro Phe Ser Ala Ala 120	Pro 25 Arg Thr Leu Arg Tyr 105 Pro	10 His Pro Tyr Ala Ala 90 Cys	Thr Tyr Leu Ala 75 Ser Leu Pro	Tyr Leu 60 Gln Arg Cys Ala	Leu Pro 45 Cys Ser Ala Ala Pro 125	Pro 30 Pro Leu Leu Pro Leu 110 Ala	15 Cys Thr Tyr Pro Met 95 Pro	Pro Tyr Leu Pro 80 Leu Gly Ser

Input Set : N:\EBONY'S\EP.txt

	32790		Ser	Gly	Pro	Gly	_	Arg	Arg	Phe	Pro		Ala	Leu	Ile	Val	_
	32791		_	_			150	_		_	_	155	1	_	_	_	160
	32793	Val	Lys	Lys	GLY		Thr	Arg	A⊥a	Leu		GIu	Phe	Leu	Arg		H1S
	32794	_	_	_		165	~1	a -			170					175	
	32796	Pro	Asp	Arg		а ье	ı Gıy	y Sei	r GI		IS PI	ne Pi	ne As	sp A		ys	
E>	32797	,	~1		180	3		. .		185		m\.	. T	_	190		
	32799		Gly 1		Trp	Arg	g Se	r Lei		C Pro	o Arg	j Th	г ьеі				
E>	32800		01	195	-1 -	m1	14 - 4	a 1	200		- 70-	D1		205	L 78.		
	32802	Asp		GIN	тте	Tnr	мет		Th	r Pro	o Ty	AL N		al In	nr A.	rg	
E>	32803	01	210	D	3	3	T1 =	215	3.3 -	14 a.k.	a	D	220	m 1	T	т	T1 -
	32805		Ата	Pro	Arg	Arg		HIS	Ата	мет	ser		ASP	Thr	гăг	Leu	
E>	32806		** - 1	** - 1	*	•	230	77 - 7	m1		n 1 -	235	a		α.	1	240
	32808	vaı	vaı	vaı	Arg		Pro	vaı	Thr	Arg		тте	ser	Asp	G.	Ln	
E>	32809	m1	T	a	T	245	D	01	т	D	250	Dla a	7	7.1.	т	255	Dha
	32811	Thr	ьeu	ser		Thr	Pro	GTA	ьeu		ser	Pne	Arg	Ата		Ald	Pne
E>	32812	3	TT -	01	260	a 1	D	77- 7	3	265	71.	TT	O	71-	270	3	T1.
	32814	Arg	HIS	_	ьeu	GLY	Pro	vaı		Thr	Ala	тгр	ser		val	Arg	11e
E>	32815	a1	т	275	7 l n	@1 m	11:0	T	280	111.	m	T 0	7	285	Dha	Dmo	T 0
	32817	СТУ		туг	Ата	GIII	HIS		ASP	HIS	ттр	ьeu	_	TAT	Pne	PIO	ьeu
E>	32818 32820	Com	290	Dho	T 011	Dho	37 - 1	295	C1	C1	7 22	T OU	300	Cor	7 an	Dro	775
			HIS	Pne	Leu	Pne	310	ser	СТА	GIU	Arg	315	Val	ser	ASP	PIO	320
E>	32821		C1.,	17 o 1	C1	1 ma		Cln	N a r	Dho	T 011		LOU	T 170	7 200	17 a 1	
п \	32823 32824	СТУ	GIU	vaı	СТУ	325	val	GIII	ASP	Pne	330	СТУ	Leu	цуѕ	Alg	335	Val
E/	32826	Πh∞	7 an	T 77.0	II i a		Птт	Dho	λαη	717		T 17.0	C117	Dho	Dro		Lou
Tr >	32827	1111	АЗР	цуз	340	File	ıyı	rne	ASII	345	1111	цуз	СТУ	FIIE	350	Суз	цец
E/	32829	Lare	Lvc	λla		G1 ₃₇	G1v	Sor	Δτα		Δrα	Cve	Τ.Δ11	G1v		Sar	T.vc
F>	32830		цуз	355	GIII	GTÄ	СТУ	Ser	360	rio	ліч	CYS	пси	365	шуз	DCI	цуз
E/	32832		Δra		Иie	Pro	Δra	Val		Gln	Δla	Va.	l Δro		τ Τ.Δι	ı G1ı	า
E>	32833	_	370	110	1113	110	mrg	375	110	OIII	niu	vu.	380	,	9 1100	. 011	
	32835			Tur	Δrσ	Pro	Phe		Δrσ	Ara	Phe	Tur		Met	Thr	Glv	Gln
E>	32836		1 110	-1-	9	110	390		*** 9	*** 9	1 110	395	0111	1100		011	400
	32838		Phe	Glv	Trp	Glv											
E>	32839	TIEF		J 1		405											
	33891	<210)> SI	EO II	O NO		1										
	33892																
	33893																
	33894					Homo	sar	oiens	3								
	33896	<400)> SI	EQUE	ICE:	274	•	•									
	33897	Met	Thr	Ala	Glu	Leu	Gln	Gln	Asp	Asp	Ala	Ala	Gly	Ala	Ala	Asp	Gly
	33898					5			-	_	10		_			15	_
	33900	His	Gly	Ser	Ser	Cys	Gln	Met	Leu	Leu	Asn	Gln	Leu	Arg	Glu	Ile	Thr
	33901		_		20	_				25					30		
	33903	Gly	Ile	Gln	Asp	Pro	Ser	Phe	Leu	His	Glu	Ala	Leu	Lys	Ala	Ser	Asn
	33904			35					40					45			
	33906	Gly	Asp	Ile	Thr	Gln	Ala	Val	Ser	Leu	Leu	Thr	Asp	Glu	Arg	Val	Lys
	33907		50					55					60				
	33909	Glu	${\tt Pro}$	Ser	Gln	Asp	Thr	Val	Ala	Thr	Glu	Pro	Ser	Glu	Val	Glu	Gly
	33910	65					70					75					80

Input Set : N:\EBONY'S\EP.txt

																	_
	34059	_	Val	Ser	Val	Tyr	Leu 870	Leu	Thr	Gly	Leu	Glu 875	Leu	Tyr	Gln	Lys	Gly 880
	34060	865	_	~ 1	a 1			G		т	370 7		3 .1.5	M++*	Cln	cor	
	34062 34063	Lys	Tyr	GIN	GLU	885	Leu	ser	Tyr	Leu	890	ТУГ	АТа	тут	GIII	895	ASII
	34065 34066	Ala	Ala	Leu	Leu 900	Met	Lys	Gly	Pro	Arg 905	Arg	Gly	Val	Lys	Glu 910	Ser	Val
	34068	Ile	Ala	Leu		Arg	Arg	Lys	Cys		Leu	Glu	Leu	Asn		Lys	Ala
	34069			915					920					925			
	34071	Ala		Leu	Phe	Glu	Thr	Asn 935	Asp	Asp	His	Ser	Val 940	Thr	Glu	Gly	Ile
	34072		930	14 - L	3	a 1	т		т1 о	Dro	Crra	T10		LOU	Tla	Tla	λen
	34074		Val	мес	ASII	GIU	950	116	116	PIO	Cys	955	1113	пси	110	110	960
	34075 34077	945	7 an	т10	Cor	Tarc		λen	Τ.Δ11	λen	Δla		Glu	Va1	Met	Ara	
	34077	ASII	ASP	TTE	Ser	965	кър	кэр	neu	изр	970	110	Olu	,41	1100	975	
	34080	His	Trp	Cys	Ser	Tyr	Leu	Gly	Gln	Asp	Ile	Ala	Glu	Asn	Leu	Gln	Leu
	34081				980					985					990		
	34083	Cys	Leu	Gly	Glu	Phe	Leu	${\tt Pro}$	Arg	Leu	Leu	Asp	Pro	Ser	Ala	Glu	Ile
E>	34084			995					000					005			
	34086	Ile	Val	Leu	Lys	Glu	Pro		Thr	Ile	Arg	Pro		Ser	Pro	Tyr	Asp
E>	34087		010				_	015				_	020	~ 1	~1		a
	34089		Cys	Ser	Arg	Phe		Ala	Val	Met	Glu		IIe	GIn	GLY	Val	
E>	34090					_	030					035					040
	34092	Thr	Val	Thr	Val												
E>	34093	-01/)	70 TI		045											
	34830						5										
	34831					143											
	34832 34833					Home	า รลเ	niens	=								
	34835						Jay	, ich	,								
	34836						Gln	Gln	Asp	Asp	Ala	Ala	Gly	Ala	Ala	Asp	Gly
	34837				014	5	0		1		10		_			15	-
	34839		Glv	Ser	Ser	Cvs	Gln	Met	Leu	Leu	Asn	Gln	Leu	Arg	Glu	Ile	Thr
	34840		•		20	-				25					30		
	34842	Gly	Ile	Gln	Asp	Pro	Ser	Phe	Leu	His	Glu	Ala	Leu	Arg	Ala	Ser	Asn
	34843			35					40					45			
	34845	Gly	Asp	Ile	Thr	Gln	Ala		Ser	Leu	Leu	Thr		Glu	Arg	Val	Lys
	34846		50					55	_ 4			_	60	a 1	** - 1	a 1	a 1
	34848		Pro	Ser	Gln	Asp		Val	Ala	Thr	G1u		Ser	GIu	vaı	GIU	
	34849	65			_	.	70	77- 7	T	21-	T a	75	т1 о	7 án	T 011	Пhr	80 uic
	34851 34852	ser	Ата	Ата	Asn	ьуs 85	GIU	Val	ьец	Ala	ьуs 90	Val	ire	ASP	пец	95	шта
	34854	λαη	λen	T.vc	Δan		T.e.ii	Gln	Δla	Δla		Ala	Leu	Ser	Leu		Glu
	34855	кър	ASII	цуз	100	изь	пси	0111	mu	105	-1-0		Lou	001	110		
	34857	Ser	Pro	Lvs		Gln	Ala	Asp	Gly	Arg	Asp	Leu	Asn	Arg	Met	His	Glu
	34858			115					120	,	~			125			
	34860	Ala	Thr	Ser	Ala	Glu	Thr	Lys	Arg	Ser	Lys	Arg	Lys	Arg	Cys	Glu	Val
	34861		130					135					140				
	34863	Trp	Gly	Glu	Asn	Pro		Pro	Asn	Asp	${\tt Trp}$		Arg	Val	Asp	Gly	
	34864	145					150					155					160

Input Set : N:\EBONY'S\EP.txt

		_	1		•	01	.	T1	T1.	D===	0	т1.	II i a	T 011	т1 о	T10	7 an
	35013		Val	мет	ASN	GLU	ьеи 950	TTE	тте	PIO	Cys	955	HIS	Leu	TIE	TTE	960
	35014 35016		7 cn	Tlo	Sor	Lare		λcn	T.611	Δsn	Δla		Glu	Va1	Met	Ara	
	35010	ASII	изр	116	DCI	965	изъ	пор	nou	71.DP	970	110	014	,		975	
	35017	His	Trp	Cvs	Ser		Leu	Glv	Gln	Asp		Ala	Glu	Asn	Leu	Gln	Leu
	35020	1110	115	0,10	980	-1-		1		985					990		
	35022	Cvs	Leu	Gly	Glu	Phe	Leu	Pro	Arg	Leu	Leu	Asp	Pro	Ser	Ala	Glu	Ile
E>	35023	-1-		995					000			_		005			
	35025	Ile	Val	Leu	Lys	Glu	Pro	Pro	Thr	Ile	Arg	Pro	Asn	Ser	${\tt Pro}$	Tyr	Asp
E>	35026		010					015					020				
	35028	Leu	Cys	Ser	Arg	Phe	Ala	Ala	Val	Met	Glu		Ile	Gln	Gly	Val	
E>	35029	025					030					035					040
	35031	Thr	Val	Thr	Val	_											
E>	35032					045											
	36734						2										
	36735					390											
	36736					Home		ni on s									
	36737 36739) sa _k	Tens	>								
	36740						Arσ	Tle	Cvs	Ala	Ara	Glu	Leu	Cvs	Glv	Asn	Gln
	36741		цуS	Olu	110	5			0,0		10			-1-	1	15	
	36743		Arq	Trp	Ile	Phe	His	Thr	Ala	Ser	Lys	Leu	Asn	Leu	Gln	Val	Leu
	36744			-	20					25	_				30		
	36746	Leu	Ser	His	Val	Leu	Gly	Lys	Asp	Val	Pro	Arg	Asp	Gly	Lys	Ala	Glu
	36747			35					40					45			
	36749	Phe		Cys	Ser	Lys	Cys		Phe	Met	Leu	Asp		Ile	Tyr	Arg	Phe
	36750		50			- 1	_	55	~ 1	- 1 -	.	Q	60	a 1	7	T	C1 n
	36752	_	Thr	Val	IIe	Ala		TTE	GLu	Ala	Leu	Ser 75	TTE	GIU	Arg	Leu	80
	36753 36755		T 011	T 011	T 011	Clu	70	λan	λνα	T.an	T.vc		Cvc	T۱۵	Δla	Ser	
	36756	гуу	ьeu	ьеи	Leu	85	пуз	изъ	ALG	Leu	90	Tite	Cys	110	mu	95	1100
	36758	Tvr	Ara	Lvs	Asn		Asp	Asp	Ser	Glv		Glu	Ile	Lys	Ala	Gly	Asn
	36759	-1-	5	-1-	100					105				-	110	-	
	36761	Gly	Thr	Val	Asp	Met	Ser	Val	Leu	Pro	Asp	Ala	Arg	Tyr	Ser	Ala	Leu
	36762			115					120					125			
	36764	Leu		Glu	Asp	Phe	Ala		Ser	Gly	Phe	Glu		Trp	Val	Glu	Asn
	36765		130		_,		~ 1	135	···	G	G	TT -	140		a 1	C1	Dro
	36767		Asp	GIn	TTE	Gin		Pro	HIS	ser	Cys	155		ser	GIU	GTÄ	160
	36768 36770		A a n	λνα	Dro	λνα	150	Cvc	λνα	C137	Cvc			T.e.u	Δrσ	Va l	
	36771	GTÀ	ASII	ALG	PIO	165	ALY	Cys	ALG	СТУ	170	AIU	AIG	пси	nrg	175	2124
	36773	Asn	Ser	Asp	Tvr		Ala	Tle	Cvs	Lvs		Pro	Arq	Lvs	Val		Arq
	36774	nop	001	пор	180	O.L.u			0 12	185					190		
	36776	Ser	Ile	Ser		Gly	Pro	Ser	Ser	Arg	Trp	Ser	Thr	Ser	Ile	Cys	Thr
	36777			195					200					205			
	36770	Glu	Glu	Pro	Ala	Leu	Ser		Val	Gly	Pro	Pro		Leu	Ala	Ser	Thr
	30113							~									
	36780		210					215			_		220		_		_
		Lys	210			Asp	Gly 230		Ser	Met	Glu	Glu 235	Glu	Thr	Pro	Gly	Ser 240

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/092,900

DATE: 11/01/2002
TIME: 12:24:31

Input Set : N:\EBONY'S\EP.txt

																	C 4 0
	36858	625					630					635	_		_		640
	36860	Arg	Gln	Arg	Ile	His	Asp	Lys	Ala	Val		Leu	Glu	Arg	Ala		Asp
	36861					645					650					655	
	36863	Glu	Lys	Phe	Ser	Ala	Leu	Glu	Glu	Lys	Glu	Lys	Glu	Leu		Gln	Leu
	36864				660					665					670		
	36866	Arg	Leu	Ala	Val	Arg	Glu	Arg	Asp	His	Asp	Leu	Glu	Arg	Leu	Arg	Asp
	36867			675					680					685			
	36869	Val	Leu	Ser	Ser	Asn	Glu	Ala	Thr	Met	Gln	Ser	Met	Glu	Ser	Leu	Leu
	36870		690					695					700				
	36872	Arg	Ala	Lys	Gly	Leu	Glu	Val	Glu	Gln	Leu	Ser	Thr	Thr	Cys	Gln	Asn
	36873	705					710					715					720
	36875	Leu	Gln	Trp	Leu	Lys	Glu	Glu	Met	Glu		Lys	Phe	Ser	Arg		Gln
	36876					725					730					735	
	36878	Lys	Glu	Gln	Glu	Ser	Ile	Ile	Gln	Gln	Leu	Gln	Thr	Ser		His	Asp
	36879				740					745					750		
	36881	Arg	Asn	Lys	Glu	Val	Glu	Asp	Leu	Ser	Ala	Thr	Leu		Cys	Lys	Leu
	36882			755					760					765			
	36884	Gly	Pro	Gly	Gln	Ser	Glu	Ile	Ala	Glu	Glu	Leu	Cys	Gln	Arg	Leu	Gln
	36885		770					775					780				
	36887	Arg	Lys	Glu	Arg	Met	Leu	Gln	Asp	Leu	Leu	Ser	Asp	Arg	Asn	Lys	
	36888						790					795					800
	36890	Val	Leu	Glu	His	Glu	Met	Glu	Ile	Gln	Gly	Leu	Leu	Gln	Ser	Val	Ser
	36891					805					810					815	
	36893	Thr	Arg	Glu	Gln	Glu	Ser	Gln	Ala	Ala	Ala	Glu	Lys	Leu		Gln	Ala
	36894				820					825					830		
	36896	Leu	Met	Glu	Arg	Asn	Ser	Glu	Leu	Gln	Ala	Leu	Arg		\mathtt{Tyr}	Leu	Gly
	36897			835					840					845			
	36899	Gly	Arg	Asp	Ser	Leu	Met	Ser	Gln	Ala	Pro	Ile		Asn	Gln	Gln	Ala
	36900		850					855					860		_		_
	36902	Glu	Val	Thr	Pro	\mathtt{Thr}		Arg	Leu	Gly	Lys		Thr	Asp	Gln	Gly	
	36903						870					875			_		880
	36905		Gln	Ile	Pro		Arg	Asp	Asp	Ser		Ser	Leu	Thr	Ala	Lys	Glu
	36906					885					890					895	
	36908		Val	Ser		Pro	Arg	Ser	Thr		Gly	Asp	Leu	Asp		Val	Ala
	36909				900					905			_		910		
	36911	Gly	Leu		Lys	Glu	Leu	Ser		Ala	Lys	Glu	Glu		Glu	Leu	Met
	36912			915					920			_	_	925	_		-
	36914	Ala			Glu	Arg	Glu		Gln	Met	Glu	Leu		Ala	Leu	GIn	Ser
	36915		930					935				_	940	_		_	
	36917	Met	Met	Ala	Val	Gln		Glu	Glu	Leu	Gln		Gln	Ala	Ala	Asp	
	36918						950			_		955				_	960
	36920		Ser	Leu	Thr		Asn	Ile	Gln	Ile		Glu	Asp	Leu	He		Asp
	36921				_	965	_		_		970		_			975	3
	36923	Leu	Gln	Met		Leu	Val	Asp	Pro		Asp	Ile	Pro	Ala		GLu	Arg
	36924				980	=		_	_	985		_			990	77. 7	a 1
	36926		Thr		Glu	Val	Leu	Leu		Arg	Glu	Lys	Val		Ser	val	GLU
E	> 36927			995	_	-		_	000	_	_	_		005	_	.	T
	36929				Gln	Glu	Ile		Gly	Asn	Arg	Arg		GIn	ьeu	ьeu	ьeu
E	> 36930		010					015					020				

Input Set : N:\EBONY'S\EP.txt

	37152			195					200					205			
	37154	Gly	Asp	Ala	Thr	Asp	Gly	Ser	Phe	Ala	Asn	Lys	His	Gly	Arg	His	Val
E>	37155		210					215					220				
	37157	Ile	Gly	His	Ile	Asp	Asp	Tyr	Ser	Ala	Leu	Arg	Gln	Gln	Ile	Ala	Glu
E>	37158	225					230					235					240
	37160	Gly	Lys	Leu	Leu	Val	Lys	Lys	Ile	Val	Ser	Leu	Val	Arg	Ser	Ala	Cys
	37161	-	-			245	_				250					255	
_	37163	Ser	Phe	Pro	Gly	Leu	Glu	Ala	Gln	Gly	Thr	Glu	Val	Leu	Gly	Ser	Lys
E>	37164				260					265					270		
	37166	Gly	Ile	His	Glu	Leu	Arg	Ser	Ser	Thr	Ser	Ala	Leu	His	His	Ala	Leu
	37167	-		275					280					285			
	37169	Glu	Glu	Ser	Ala	Ser	Leu	Leu	Thr	Met	Phe	Trp	Arg	Ala	Ala	Leu	Pro
	37170		290	•				295					300				
	37172	Ser	Thr	His	Ile	Pro	Val	Leu	${\tt Pro}$	Gly	Lys	Val	Gly	Glu	Ser	Thr	Glu
E>	37173	305					310					315					320
	37175	Arg	Glu	Leu	Leu	Glu	Leu	Arg	Thr	Lys	Val	Ser	Lys	Gln	Glu	Arg	Leu
E>	37176					325					330					335	
	37178	Leu	Gln	Ser	Thr	Thr	Glu	His	Leu	Lys	Asn	Ala	Asn	Gln		Lys	Glu
E>	37179				340					345					350		
	37181	Ser	Met	Glu	Gln	Phe	Ile	Val		Gln	Leu	Thr	Arg		His	Asp	Val
E>	37182			355					360					365		_	
	37184	Leu	Lys	Lys	Ala	Arg	Thr	Asn	Leu	Glu	Val	Lys		Leu	Arg	Ala	Leu
E>	37185		370					375					380				
	37187	Pro	Cys	Thr	Pro	Ala											
	27100	205															
E>			_				390										
E>	37795	<210															
E>	37795 37796	<210 <213	L> LI	ENGTI	H: 23												
E>	37795 37796 37797	<210 <211 <212	L> LI 2> TY	ENGTI YPE:	H: 23 PRT	327	1		_								
E>	37795 37796 37797 37798	<210 <211 <212 <213	L> L1 2> T3 3> O1	ENGTI YPE : RGAN	H: 23 PRT ISM:	327 Homo	1	piens	5								
E>	37795 37796 37797 37798 37800	<210 <213 <213 <213 <400	L> LH 2> TY 3> OH 0> SH	ENGTI YPE: RGANI EQUEI	H: 23 PRT ISM: NCE:	327 Homo 294	l o sap			Ser	Cln	Uic	T.011	Δen	Δsn	Τ.ρ.ιι	Lvs
E>	37795 37796 37797 37798 37800 37801	<210 <213 <213 <213 <400 Met	L> LH 2> TY 3> OH 0> SH	ENGTI YPE: RGANI EQUEI	H: 23 PRT ISM: NCE:	327 Homo 294 Tyr	l o sap			Ser		His	Leu	Asn	Asp		Lys
E>	37795 37796 37797 37798 37800 37801 37802	<210 <213 <213 <400 Met	L> LH 2> TY 3> OH)> SH Ser	ENGTI YPE: RGANI EQUEI Asn	H: 23 PRT ISM: NCE: Gly	327 Homo 294 Tyr 5	ı o saı Arg	Thr	Leu		10					15	
E>	37795 37796 37797 37798 37800 37801 37802 37804	<210 <213 <213 <400 Met	L> LH 2> TY 3> OH)> SH Ser	ENGTI YPE: RGANI EQUEI Asn	H: 23 PRT ISM: NCE: Gly Phe	327 Homo 294 Tyr 5	ı o saı Arg	Thr	Leu	Arg	10				Glu	15	
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805	<210 <211 <211 <213 <400 Met 1 Lys	L> LH 2> TY 3> OH 5> SH Ser Glu	ENGTI YPE: RGANI EQUEI Asn Asn	H: 23 PRT ISM: NCE: Gly Phe 20	Homo 294 Tyr 5 Ser	l Sap Arg Leu	Thr Lys	Leu Leu	Arg 25	10 Ile	Tyr	Phe	Leu	Glu 30	15 Glu	Arg
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805 37807	<210 <211 <211 <213 <400 Met 1 Lys	L> LH 2> TY 3> OH 5> SH Ser Glu	ENGTI YPE: RGAN: EQUEN Asn Asn	H: 23 PRT ISM: NCE: Gly Phe 20	Homo 294 Tyr 5 Ser	l Sap Arg Leu	Thr Lys	Leu Leu Ser	Arg 25	10 Ile	Tyr	Phe	Leu	Glu 30	15 Glu	Arg
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805 37807 37808	<210 <211 <211 <213 <400 Met 1 Lys	l> LH 2> TY 3> OH)> SH Ser Glu	ENGTH YPE: RGANI EQUEN Asn Asn Gln 35	PRT ISM: ISM: ICE: ICE: ICE: ICE: ICE: ICE: ICE: ICE	Homo 294 Tyr 5 Ser	sap Arg Leu Glu	Thr Lys Ala	Leu Leu Ser 40	Arg 25 Arg	10 Ile Glu	Tyr Asp	Phe Ile	Leu Tyr 45	Glu 30 Lys	15 Glu Arg	Arg Asn
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805 37807 37808 37810	<210 <211 <211 <213 <400 Met 1 Lys	l> LH 2> TY 3> OH 5> SH Ser Glu Gln	ENGTH YPE: RGANI EQUEN Asn Asn Gln 35	PRT ISM: ISM: ICE: ICE: ICE: ICE: ICE: ICE: ICE: ICE	Homo 294 Tyr 5 Ser	sap Arg Leu Glu	Thr Lys Ala Val	Leu Leu Ser 40	Arg 25 Arg	10 Ile Glu	Tyr Asp	Phe Ile	Leu Tyr 45	Glu 30 Lys	15 Glu Arg	Arg Asn
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805 37807 37808 37810 37811	<210 <211 <211 <213 <400 Met 1 Lys Met	1> LH 2> TY 3> OH 5> SH Ser Glu Glu Glu 50	ENGTH YPE: RGANI EQUEN Asn Asn Gln 35 Leu	PRT ISM: ISM: ISM: ISM: ISM: ISM: ISM: ISM:	Homo 294 Tyr 5 Ser Tyr	sap Arg Leu Glu	Thr Lys Ala Val	Leu Leu Ser 40 Glu	Arg 25 Arg Ser	10 Ile Glu Leu	Tyr Asp Lys	Phe Ile Arg 60	Leu Tyr 45 Glu	Glu 30 Lys Leu	15 Glu Arg Gln	Arg Asn Asp
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805 37807 37808 37810 37811 37813	<210 <211 <211 <400 Met 1 Lys Met Ile	1> LH 2> TY 3> OH 5> SH Ser Glu Glu Glu 50	ENGTH YPE: RGANI EQUEN Asn Asn Gln 35 Leu	PRT ISM: ISM: ISM: ISM: ISM: ISM: ISM: ISM:	Homo 294 Tyr 5 Ser Tyr	sap Arg Leu Glu	Thr Lys Ala Val	Leu Leu Ser 40 Glu	Arg 25 Arg Ser	10 Ile Glu Leu	Tyr Asp Lys	Phe Ile Arg 60	Leu Tyr 45 Glu	Glu 30 Lys Leu	15 Glu Arg Gln	Arg Asn Asp
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805 37807 37808 37810 37811 37813 37814	<210 <211 <211 <400 Met 1 Lys Met Ile Lys 65	l> LH 2> TY 3> OH 5> SI Ser Glu Glu 50 Lys	ENGTH YPE: RGANT EQUEN Asn Asn Gln 35 Leu	H: 23 PRT ISM: ISM: ISM: Phe 20 Lys Lys His	Homo 294 Tyr 5 Ser Tyr Val	Arg Leu Glu Glu Asp 70	Thr Lys Ala Val 55 Lys	Leu Leu Ser 40 Glu	Arg 25 Arg Ser Trp	10 Ile Glu Leu Ala	Tyr Asp Lys Asp 75	Phe Ile Arg 60 Val	Leu Tyr 45 Glu Glu	Glu 30 Lys Leu Asn	15 Glu Arg Gln Leu	Arg Asn Asp Asn 80
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805 37807 37880 37810 37811 37813 37814 37816	<210 <211 <211 <211 <400 Met 1 Lys Met Ile Lys 65 Ser	l> LH 2> TY 3> OH 5> SI Ser Glu Glu 50 Lys	ENGTH YPE: RGANT EQUEN Asn Asn Gln 35 Leu	H: 23 PRT ISM: ISM: ISM: Phe 20 Lys Lys His	Homo 294 Tyr 5 Ser Tyr Val	Arg Leu Glu Glu Asp 70	Thr Lys Ala Val 55 Lys	Leu Leu Ser 40 Glu	Arg 25 Arg Ser Trp	10 Ile Glu Leu Ala	Tyr Asp Lys Asp 75	Phe Ile Arg 60 Val	Leu Tyr 45 Glu Glu	Glu 30 Lys Leu Asn	15 Glu Arg Gln Leu	Arg Asn Asp Asn 80
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805 37807 37808 37810 37811 37813 37814 37816 37817	<210 <211 <211 <400 Met 1 Lys Met Ile Lys 65 Ser	L> LH 2> TY 3> OH 3> OH Ser Glu Glu 50 Lys	ENGTH YPE: RGANI EQUEN Asn Asn Gln 35 Leu Gln Asn	H: 23 PRT ISM: NCE: Gly Phe 20 Lys Lys His Glu	Homo 294 Tyr 5 Ser Tyr Val Leu Ala 85	Arg Leu Glu Glu Asp 70 Glu	Thr Lys Ala Val 55 Lys Leu	Leu Ser 40 Glu Thr	Arg 25 Arg Ser Trp	10 Ile Glu Leu Ala Gln 90	Tyr Asp Lys Asp 75 Phe	Phe Ile Arg 60 Val Glu	Leu Tyr 45 Glu Glu	Glu 30 Lys Leu Asn	15 Glu Arg Gln Leu Gln 95	Arg Asn Asp Asn 80 Gln
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805 37807 37880 37810 37811 37813 37814 37816	<210 <211 <211 <400 Met 1 Lys Met Ile Lys 65 Ser	L> LH 2> TY 3> OH 3> OH Ser Glu Glu 50 Lys	ENGTH YPE: RGANI EQUEN Asn Asn Gln 35 Leu Gln Asn	H: 23 PRT ISM: NCE: Gly Phe 20 Lys Lys His Glu	Homo 294 Tyr 5 Ser Tyr Val Leu Ala 85	Arg Leu Glu Glu Asp 70 Glu	Thr Lys Ala Val 55 Lys Leu	Leu Ser 40 Glu Thr	Arg 25 Arg Ser Trp	10 Ile Glu Leu Ala Gln 90	Tyr Asp Lys Asp 75 Phe	Phe Ile Arg 60 Val Glu	Leu Tyr 45 Glu Glu	Glu 30 Lys Leu Asn	15 Glu Arg Gln Leu Gln 95	Arg Asn Asp Asn 80 Gln
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805 37807 37808 37810 37811 37813 37814 37816 37817 37819	<210 <211 <211 <211 <400 Met 1 Lys Met Ile Lys 65 Ser Glu	L> LH 2> TY 3> OH 5> SI 6Hu 6Hu 50 Lys 6Hn Thr	ENGTH YPE: RGANI EQUEN Asn Asn Gln 35 Leu Gln Asn	H: 23 PRT ISM: ISM: Gly Phe 20 Lys Lys Glu His 100	Homo 294 Tyr 5 Ser Tyr Val Leu Ala 85 Val	Arg Leu Glu Glu Asp 70 Glu Tyr	Thr Lys Ala Val 55 Lys Leu Glu	Leu Ser 40 Glu Thr Arg	Arg 25 Arg Ser Trp Arg Leu 105	10 Ile Glu Leu Ala Gln 90 Glu	Tyr Asp Lys Asp 75 Phe Asn	Phe Ile Arg 60 Val Glu Lys	Leu Tyr 45 Glu Glu Glu Ile	Glu 30 Lys Leu Asn Arg Gln 110	15 Glu Arg Gln Leu Gln 95 Leu	Arg Asn Asp Asn 80 Gln Leu
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805 37807 37881 37810 37811 37813 37814 37816 37817 37819 37820 37822 37823	<210 <211 <211 <400 Met 1 Lys Met Ile Lys 65 Ser Glu Gln	l> LH 2> TY 3> OH 3> OH 50> SI Glu Glu 50 Lys Gln Thr	ENGTH YPE: RGANI RGANI EQUEN Asn Asn Gln 35 Leu Gln Asn Glu Glu 115	H: 23 PRT ISM: ISM: Gly Phe 20 Lys Lys His Glu His 100 Ser	Homo 294 Tyr 5 Ser Tyr Val Leu Ala 85 Val	Arg Leu Glu Glu Asp 70 Glu Tyr Leu	Thr Lys Ala Val 55 Lys Leu Glu Ala	Leu Ser 40 Glu Thr Arg Leu Lys 120	Arg 25 Arg Ser Trp Arg Leu 105 Asn	10 Ile Glu Leu Ala Gln 90 Glu Glu	Tyr Asp Lys Asp 75 Phe Asn Ala	Phe Ile Arg 60 Val Glu Lys Ala	Tyr 45 Glu Glu Glu Ile Arg 125	Glu 30 Lys Leu Asn Arg Gln 110 Met	15 Glu Arg Gln Leu Gln 95 Leu Ala	Arg Asn Asp Asn 80 Gln Leu Ala
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805 37807 37880 37810 37811 37813 37814 37816 37817 37819 37820 37822	<210 <211 <211 <400 Met 1 Lys Met Ile Lys 65 Ser Glu Gln	l> LH 2> TY 3> OH 3> OH 50> SI Glu Glu 50 Lys Gln Thr	ENGTH YPE: RGANI RGANI EQUEN Asn Asn Gln 35 Leu Gln Asn Glu Glu 115	H: 23 PRT ISM: ISM: Gly Phe 20 Lys Lys His Glu His 100 Ser	Homo 294 Tyr 5 Ser Tyr Val Leu Ala 85 Val	Arg Leu Glu Glu Asp 70 Glu Tyr Leu	Thr Lys Ala Val 55 Lys Leu Glu Ala	Leu Ser 40 Glu Thr Arg Leu Lys 120	Arg 25 Arg Ser Trp Arg Leu 105 Asn	10 Ile Glu Leu Ala Gln 90 Glu Glu	Tyr Asp Lys Asp 75 Phe Asn Ala	Phe Ile Arg 60 Val Glu Lys Ala Leu	Tyr 45 Glu Glu Glu Ile Arg 125	Glu 30 Lys Leu Asn Arg Gln 110 Met	15 Glu Arg Gln Leu Gln 95 Leu Ala	Arg Asn Asp Asn 80 Gln Leu Ala
E>	37795 37796 37797 37798 37800 37801 37802 37804 37805 37807 37881 37810 37811 37813 37814 37816 37817 37819 37820 37822 37823	<210 <211 <211 <400 Met 1 Lys Met Ile Lys 65 Ser Glu Gln Leu	L> LH 2> TY 3> OH 3> OH 50> SH Glu Glu 50 Lys Gln Thr Glu Val 130	ENGTH YPE: RGANI RGANI EQUEN Asn Asn Gln 35 Leu Gln Asn Glu Glu 115 Glu	H: 23 PRT ISM: ISM: ISM: ISM: ISM: ISM: ISM: ISM:	Homo 294 Tyr 5 Ser Tyr Val Leu Ala 85 Val Arg	Arg Leu Glu Glu Asp 70 Glu Tyr Leu Lys	Thr Lys Ala Val 55 Lys Leu Glu Ala Glu 135	Leu Ser 40 Glu Thr Arg Leu Lys 120 Cys	Arg 25 Arg Ser Trp Arg Leu 105 Asn	10 Ile Glu Leu Ala Gln 90 Glu Glu Leu	Tyr Asp Lys Asp 75 Phe Asn Ala Glu	Phe Ile Arg 60 Val Glu Lys Ala Leu 140	Tyr 45 Glu Glu Glu Ile Arg 125 Ser	Glu 30 Lys Leu Asn Arg Gln 110 Met	15 Glu Arg Gln Leu Gln 95 Leu Ala Lys	Arg Asn Asp Asn 80 Gln Leu Ala Leu

Input Set : N:\EBONY'S\EP.txt

	•	27076		020					935					040				
		37976 37978	λαn	930	Thr	Clu	λcn	Thr		Thr	Clu	Dho	Thr	940	Sor	Tlo	Glu	Clu
		37978	-	ASP	1111	GIU	ASP	950	Ser	1 11 L	Gru	Pile	955	ASP	261	116	GIU	960
		37981		λla	λla	Uic	Uic		Die	Gln.	Cln	LOU		Luc	Va l	λla	Lou	
		37982	GIU	нта	нта	птэ	965	261	птэ	GIII	GIII	970	Val	цуз	Vai	АТа	975	Giu
		37984	Lvc	Sar	Τ.Δ11	λla		Val	Glu	Thr	Gln.		Dro	Sor	Dho	Ser		Dro
		37985	цуз	261	пец	980	1111	Vul	Giu	1111	985	กรแ	110	DCI	1110	990	110	110
	•	37987	Ser	Pro	Met		Glv	Asn	Ser	Asn		Cvs	Len	G1n	G111		Met	Leu
	E>	37988	DCI	110	995		OT,	1105	001	000	111.9	CID	200	0111	005	014	1100	Lea
	_ ,	37990	His	T.eu		Δla	Glu	Tle	His		His	Leu	Glu	Glu		Ara	Lvs	Δla
	E>	37991	1110	010	**** 9	711LG	Olu	110	015	0111		Dea	014	020	_10	9	_10	
	_ ,	37993	Glu		Glu	Leu	Lvs	Glu		Lvs	Ala	Gln	Ile		Glu	Ala	Glv	Phe
	E>	37994		014	0.1.0	200	2,0	030		_15		01	035	014	0		0 1	040
		37996		Ser	Val	Ser	His		Arq	Asn	Thr	Met		Ser	Leu	Cys	Leu	
	E>	37997					045		,			050				-1-	055	
		37999	Asn	Ala	Glu	Leu		Glu	Gln	Met	Glv		Thr	Met	Ser	Asp	Glv	Trp
	E>	38000				060	•				065					070	-	•
		38002	Glu	Ile	Glu	Glu	Asp	Lys	Glu	Lys	Gly	Glu	Val	Met	Val	Glu	Thr	Val
	E>	38003			075		_	_		080	_				085			
		38005	Val	Thr	Lys	Glu	Gly	Leu	Ser	Glu	Ser	Ser	Leu	Gln	Ala	Glu	Phe	Arg
	E>	38006		090					095					100				
		38008	Lys	Leu	Gln	Gly	Lys	Leu	Lys	Asn	Ala	His	Asn	Ile	Ile	Asn	Leu	Leu ·
	E>	38009	105					110					115					120
		38011	Lys	Glu	Gln	Leu	Val	Leu	Ser	Ser	Lys	Glu	Gly	Asn	Ser	Lys	Leu	Thr
	E>	38012					125					130					135	
		38014	Pro	Glu	Leu	Leu	Val	His	Leu	Thr	Ser	Thr	Ile	Glu	Arg	Ile	Asn	Thr
	E>	38015				140					145					150		
		38017	Glu	Leu	Val	Gly	Ser	Pro	Gly		His	Gln	His	Gln		Glu	Gly	Asn
	E>	38018			155			_		160		_			165		_	_
		38020	Val		Val	Arg	Pro	Phe		Arg	Pro	Gln	Ser		Asp	Leu	Gly	Ala
	E>	38021		170			_		175			_	_	180		_		_
		38023		Phe	Thr	Val	Asp		His	GIn	GIn	Leu		Asn	GIn	Ser	GIn	
	E>	38024			_	a 1		190	-		D 1	~	195	D	a 1	a	m l	200
		38026	Arg	Asp	Pro	GTĀ		GIn	Pro	Ата	Pne		Leu	Pro	GIA	ser		GIN
•	E>	38027	mi a	T 013	7 ~~~	Com	205	T 011	Com	C1 n	Crra	210	C1n	7 ma	Птт	Cln	215	Tou
	E	38029 38030	HIS	Leu	Arg	220	GIII	Leu	ser	GIII	225	гуѕ	GIII	AIG	тут	230	ASP	Leu
•	E/	38032	Cln	Clu	Lvc		LOU	Lou	Sar	Glu		Thr	Va l	Dho	λla		λla	λen
	F>	38033	GIII	GIU	235	пеп	пец	шец	261	240	АІЦ	TIII	vai	rne	245	GIII	AIG	NOII
•	E/	38035	Glu	T.A11		T.37.C	Тиг	Δra	Va l		Τ.Δ11	Sor	Glu	Sar		Va 1	Lve	Gln
,	E>	38036	Giu	250	Giu	цуз	1 7 1	nrg	255	Mec	пец	Der	GIU	260	пси	vuı	בענג	GIII
		38038	Asn		T.VS	Gln	Tle	Gln		Asp	Phe	Gln	Asp		Glv	Tvr	Glu	Thr
1	E>	38039	-	DCI	шуз	OII	110	270	vu.	шър	THE	OIII	275	Leu	011	-1-	Olu	280
•	_ •	38041		Glv	Ara	Ser	Glu		Glu	Ala	Glu	Ara		Glu	Thr	Thr	Ser	
1	E>	38042	010	J-1	9	201	285		Jiu	u	JIU	290	J.u	J_4			295	0
•	_ •	38044	Glu	Cvs	Glu	Glu		Asn	Ser	Leu	Lvs		Met	Val	Leu	Met		Glv
1	E>	38045		-1-		300					305					310		1
•	•	38047	Leu	Cys	Ser		Gln	Glv	Ara	Ara		Ser	Thr	Leu	Ala		Ser	Ser
1	E>	38048		4 -	315			- 4	,	320	_				325			

Input Set : N:\EBONY'S\EP.txt

F>	38197 38198		Ser	Ala 115	Ser	Ser	Thr	Pro	Gly 120		Asp	Ser	Val		Leu	Ser	Phe
F/			Dh a		G1	r	a 1	T			a	D	**- 1	125	_	m1	_
	38200			ser	GTA	Leu	GTA		Asp	Thr	ser	Pro		мет	ьys	Thr	Pro
E>	38201		130					135	_				140				
	38203	Pro	Lys	Leu	Glu	Gly	Asp	Ala	Thr	Asp	Gly	Ser	Phe	Ala	Asn	Lys	${ t His}$
E>	38204						150					155					160
	38206	Gly	Arg	His	Val	Ile	Gly	His	Ile	Asp	Asp	\mathtt{Tyr}	Ser	Ala	Leu	Arg	Gln
E>	38207					165					170					175	
	38209	Gln	Ile	Ala	Glu	Gly	Lys	Leu	Leu	Val	Lys	Lys	Ile	Val	Ser	Leu	Val
E>	38210				180	_	_			185	-	-			190		
	38212	Ara	Ser	Ala	Cvs	Ser	Phe	Pro	Glv	Leu	Glu	Ala	Gln	Glv	Thr	Glu	Glv
E>	38213			195	- 1				200					205			0-1
	38215	Ser	Lvs		Tle	Hic	Glu	T.eu		Sar	Sor	Thr	Sar		Lou	uic	uic
F>	38216	DCI	210	Gry	110	1113	GIU	215		Ser	Der	1111	220	АТа	пеп	птэ	птэ
Ľ/		7 l n		C1.,	Clu	Com	7 l a			т о	mb	Mat		m	7	31-	21-
	38218		ьeu	GIU	GIU	ser		ser	Leu	Leu	THE		Pne	ттр	Arg	Ата	
E/	38219		D	G	m1	TT ! =	230		1	_	_	235	_				240
	38221	ьeu	Pro	ser	Thr		тте	PLO	vaı	ьeu		GTĀ	гàг	GIn	GLY		ser
E>	38222	_,		_		245	_		_		250		_			255	_
	38224	Thr	Glu	Arg		Leu	Leu	GLu	Leu		Thr	Lys	Val	Ser	_	Gln	Glu
E>	38225				260		_	_		265					270		
	38227	Gln	Leu		Gln	Ser	Thr	Thr		His	Leu	Lys	Asn	Ala	Asn	Gln	Gln
E>	38228			275					280					285			
	38230	Lys	Glu	Ser	Met	Glu	Gln	Phe	Ile	Val	Ser	Val	Thr	Arg	Thr	His	Asp
E>	38231		290					295					300				
	38233	Val	Leu	Lys	Lys	Ala	Arg	Thr	Asn	Leu	Glu	Val	Lys	Ser	Leu	Arg	Ala
E>	38234	305					310					315					320
	38236	Leu	Pro	Cys	Thr	Pro	Ala	Leu									
E>	38237					325											
	38840	<210)> SI	EQ II	NO:	296	5										
	38841																
	38842																
	38843					Homo	sar	oiens									
	38845						<u>-</u> -		•								
	38846						Δrσ	Thr	Sor	Thr	Sor	G1v	C1 v	λen	Va 1	Glu	λcn
	38847		**** 9	110	niu	5	mrg	1111	DCI	1111	10	GIY	GTÅ	тэр	val	15	ASII
	38849		λen	Sar	Cln	-	Clu	λΊэ	Clu	T 011		λνα	Cln	nho	C1.,		7 ~~
	38850	пси	ASII	DCI	20	Mon	GIU	лια	Gru	25	AIG	мту	GTII	FIIE		GIU	Arg
	38852	Cln	Cln	C111		C1.1	II i a	Wa 1	Птт		Т о	т о	<i>α</i> 1	7	30	т1.	Cl =
	38853	GTII	GIII		1111	GIU	птъ	vaı		GIU	ьeu	Leu	GIU		гуѕ	rre	GIII
		T	T	35	a1	a 1	a		40		_		~1	45		_	
	38855	ьeu		GIII	GIU	GIU	ser		ьеu	Ата	ьуs	Asn		Ата	Ата	Arg	Met
	38856		50	_				55	_				60	_			_
	38858		Ата	Leu	val	GLu		GLu	гăг	GLu	Cys		Leu	Glu	Leu	Ser	
	38859	65			_		70					75					80
	38861	Lys	Leu	Lys	Gly		Thr	Lys	Asn	${\tt Trp}$		Asp	Val	Pro	Gly	Asp	Gln
	38862					85					90					95	
	38864	Val	Lys	Pro	Asp	Gln	Tyr	Thr	Glu	Thr	Leu	Ala	Gln	Arg	Asp	Lys	Arg
	38865				100					105					110		
	38867	Ile	Glu	Glu	Leu	Asn	Gln	Ser	Leu	Ala	Ala	Gln	Glu	Arg	Leu	Val	Glu
	38868			115					120					125			

Input Set : N:\EBONY'S\EP.txt

	39017 39018	Leu	Glu	Lys 915		Leu	Ala	Thr	Val 920	Glu	Thr	Gln	Asn	Pro 925	Ser	Phe	Ser
	39020					Met	Gly		Asp	Ser	Asn	Arg			Gln	Glu	Glu
	39021 39023		930 Leu	His	Leu	Arq	Ala	935 Glu		His	Gln	His	940 Leu	Glu	Glu	Lvs	Ara
	39024					_	950					955			,	-1-	960
	39026 39027	Lys	Ala	Glu	Glu	Glu 965	Leu	Lys	Glu	Leu	Lys 970		Gln	Ile	Glu	Glu 975	
	39029 39030	Gly	Phe	Ser	Ser 980	Val	Ser	His	Ile	Arg 985	Asn		Met	Leu	Ser 990		Cys
	39032	Leu	Glu	Asn		Glu	Len	Lvs	Glu			Glv	Glu	Thr		Ser	Δen
E>	39033			995				_10	000	0111	1100	011	O_Lu	005	ricc	DCI	лэр
	39035	Gly	Trp	Glu	Ile	Glu	Glu	Asp	Lys	Glu	Lys	Gly	Glu		Met	Val	Glu
E>	39036		010					015					020				
	39038	Thr	Val	Val	Thr	Lys	Glu	Gly	Leu	Ser	Glu	Ser	Ser	Leu	Gln	Ala	Glu
E>	39039						030					035					040
	39041	Phe	Arg	Lys	Leu	Gln	Gly	Lys	Leu	Lys	Asn	Ala	His	Asn	Ile	Ile	Asn
E>	39042					045					050					055	
	39044	Leu	Leu	Lys		Gln	Leu	Val	Leu		Ser	Lys	Glu	Gly		Ser	Lys
E>	39045	τ	m1	D	060	_	_		•	065		_			070		_
	39047	Leu	Thr		GIU	Leu	Leu	Val		Leu	Thr	Ser	Thr		Glu	Arg	Ile
E/	39048	λan	Thr	075	T OU	Wa I	C1**	Com	080	C1	T	***	a1	085	01	a 1	a 1
F>	39050 39051	ASII	090	GIU	Leu	Val	СТУ		Pro	СТУ	rĀS	HIS		HIS	GIn	GIU	Glu
F>	39053	G1 v		Wa I	Пhr	Wa I	λra	095	Dho	Dro	7 22	Dwo	100	C	T	7	Т
E>	39054		USII	Vai	1111	vaı	110	PIO	Pile	PIO	Arg	115	GIII	ser	Leu	ASP	
	39056		Ala	Thr	Phe	Thr		Asn	Δla	ніс	Gln		T.011	Men	λan	Cln	120
E>	39057	0-1			1 110	125	, 41	nsp	mu	1115	130	GIII	пец	изр	Poir	135	Set
	39059	Gln	Pro	Ara	Asp		Glv	Pro	Gln	Pro		Phe	Ser	Len	Pro		Ser
E>	39060			,	140		1			145			001	Lou	150		DCI
	39062	Thr	Gln	His		Arg	Ser	Gln	Leu		Gln	Cvs	Lvs	Gln		Tvr	Gln
E>	39063			155		_			160				_1	165	5	-1-	
	39065	Asp	Leu	Gln	Glu	Lys	Leu	Leu	Leu	Ser	Glu	Ala	Thr	Val	Phe	Ala	Gln
E>	39066		170					175					180				
	39068	Ala	Asn	Glu	Leu	Glu	Lys	Tyr	Arg	Val	Met	Leu	Ser	Glu	Ser	Leu	Val
E>	39069						190					195					200
	39071	Lys	Gln	Asp	Ser		Gln	Ile	Gln	Val	Asp	Phe	Gln	Asp	Leu	Gly	\mathtt{Tyr}
E>	39072					205					210					215	
	39074		Thr														Thr
E>	39075		5				~ 1										
	39077	ser	Pro		Cys	GLu	Glu	Hls		Ser	Leu	Lys	GLu		Val	Leu	Met
E>	39078	C1	C1	235	Q	C	a 1	01 -	240	•	_	a 1	_	245	_		_
F>	39080 39081	GIU	250	Leu	Cys	ser	GIU		GTA	Arg	Arg	GTA		Thr	Leu	Ala	Ser
E/		Sor		C1.,	λκα	T *** C	Dro	255	c1	7. ~ ~	71 -	т	260	.	a 1	~1	a 1
E>	39083 39084	265	Set	GIU	ату	пĀР	270	ьeu	GIU	ASN	GTU		σтλ	ьys	GIN	GLU	
- - 7	39086		Δτα	Va 1	ጥህጉ	G117		Sor	G1 ii	λας	т1^	275	Wa 7	T 011	7 ~~	T ***	280
E>	39087	- 110	-31.9	741	- Y -	285	ny s	PET	GIU	UDII	290	ьeu	val	neu	нтд	ьуs 295	ASP
	39089	Ile	Glu	Asp	Leu		Ala	Gln	Ten	Gln		Δla	Δan	T.vc	Va 1		Gln
				F		-, -		J-11					-1011	_13	1 W T	- T C	O.1.1

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/092,900

DATE: 11/01/2002
TIME: 12:24:31

Input Set : N:\EBONY'S\EP.txt

E>	39237					085					090					095	
	39239	Lvs	His	Glv	Ara		Val	Ile	Gly	His	Ile	Asp	Asp	Tyr	Ser	Ala	Leu
E>	39240	-1-		2	100				-	105		-	-		110		
	39242	Ara	Gln	Gln	Ile	Ala	Glu	Gly	Lys	Leu	Leu	Val	Lys	Lys	Ile	Val	Ser
E>	39243	5		115				-	120				_	125			
	39245	Leu	Val	Arq	Ser	Ala	Cys	Ser	Phe	Pro	Gly	Leu	Glu	Ala	Gln	Gly	Thr
E>	39246		130				_	135					140				
	39248	Glu	Gly	Ser	Lys	Gly	Ile	His	Glu	Leu	Arg	Ser	Ser	Thr	Ser	Ala	Leu
E>	39249		-		_		150					155					160
	39251	His	His	Ala	Leu	Glu	Glu	Ser	Ala	Ser	Leu	Leu	Thr	Met	Phe	Trp	Arg
E>	39252					165					170					175	
	39254	Ala	Ala	Leu	Pro	Ser	Thr	His	Ile	Pro	Val	Leu	Pro	Gly	Lys	Gln	Gly
E>	39255				180					185					190		
	39257	Glu	Ser	Thr	Glu	Arg	Glu	Leu	Leu	Glu	Leu	Arg	Thr	Lys	Val	Ser	Lys
E>	39258			195					200					205			
	39260	Gln	Glu	Gln	Leu	Leu	Gln	Ser	Thr	Thr	Glu	His	Leu	Lys	Asn	Ala	Asn
E>	39261		210					215					220				
	39263	Gln	Gln	Lys	Glu	Ser	Met	Glu	Gln	Phe	Ile		Ser	Val	Thr	Arg	
E>	39264						230			_		235				_	240
	39266	His	Asp	Val	Leu		Lys	Ala	Arg	Thr		Leu	Glu	Val	Lys		Leu
E>	39267					245			_ •	_	250					255	
	39269	Arg	Ala	Leu		Cys	Thr	Pro	Ala								
E>	39270				260					265							
	40126						ł									•	
	40127					354											
	40128	<212	2> T	YPE:	PRT			ai an	-								
	40128 40129	<212 <212	2> T 3> OI	YPE: RGAN	PRT ISM:	Homo	sap	piens	5								
	40128 40129 40131	<213 <213 <40	2> T 3> OI 0> SI	YPE: RGANI EQUEI	PRT ISM: NCE:	Homo				Glv	Thr	λla	Tro	Δra	Pro	Thr	Ser
	40128 40129 40131 40132	<213 <213 <400 Met	2> T 3> OI 0> SI	YPE: RGANI EQUEI	PRT ISM: NCE:	Homo 304 Ala				Gly		Ala	Trp	Arg	Pro		Ser
	40128 40129 40131 40132 40133	<213 <213 <400 Met 1	2> T: 3> OI 0> SI Asp	YPE: RGAN: EQUEI Leu	PRT ISM: NCE: Glu	Homo 304 Ala 5	Ala	Lys	Asn		10					15	
	40128 40129 40131 40132 40133 40135	<213 <213 <400 Met 1	2> T: 3> OI 0> SI Asp	YPE: RGAN: EQUEI Leu	PRT ISM: NCE: Glu Asp	Homo 304 Ala 5	Ala	Lys	Asn	Ile	10					15	
	40128 40129 40131 40132 40133 40135 40136	<212 <212 <400 Met 1 Ala	2> TY 3> OI 0> SI Asp Glu	YPE: RGAN: EQUE Leu Gly	PRT ISM: NCE: Glu Asp 20	Homo 304 Ala 5 Phe	Ala Glu	Lys Leu	Asn Gly	Ile 25	10 Ser	Ser	Lys	Gln	Lys 30	15 Arg	Lys
	40128 40129 40131 40132 40133 40135 40136 40138	<212 <212 <400 Met 1 Ala	2> TY 3> OI 0> SI Asp Glu	YPE: RGANI EQUE Leu Gly Lys	PRT ISM: NCE: Glu Asp 20	Homo 304 Ala 5 Phe	Ala Glu	Lys Leu	Asn Gly Ile	Ile 25	10 Ser	Ser	Lys	Gln	Lys 30	15 Arg	Lys
	40128 40129 40131 40132 40133 40135 40136 40138 40139	<211 <211 <400 Met 1 Ala	2> TY 3> OI 0> SI Asp Glu	YPE: RGANI EQUE Leu Gly Lys 35	PRT ISM: NCE: Glu Asp 20 Thr	Homo 304 Ala 5 Phe	Ala Glu Lys	Lys Leu Met	Asn Gly Ile 40	Ile 25 Gly	10 Ser Val	Ser Leu	Lys Thr	Gln Leu 45	Lys 30 Phe	15 Arg Arg	Lys Tyr
	40128 40129 40131 40132 40133 40135 40138 40138 40139 40141	<211 <211 <400 Met 1 Ala	2> TY 3> OI 0> SI Asp Glu	YPE: RGANI EQUE Leu Gly Lys 35	PRT ISM: NCE: Glu Asp 20 Thr	Homo 304 Ala 5 Phe	Ala Glu Lys	Lys Leu Met	Asn Gly Ile 40	Ile 25 Gly	10 Ser Val	Ser Leu	Lys Thr	Gln Leu 45	Lys 30 Phe	15 Arg Arg	Lys Tyr
	40128 40129 40131 40132 40133 40135 40136 40138 40139 40141 40142	<21: <21: <400 Met 1 Ala Lys Ser	2> TY 3> OI 0> SI Asp Glu Thr Asp 50	YPE: RGAN: EQUE Leu Gly Lys 35 Trp	PRT ISM: NCE: Glu Asp 20 Thr	Homo 304 Ala 5 Phe Val	Ala Glu Lys Lys	Lys Leu Met Leu 55	Asn Gly Ile 40 Phe	Ile 25 Gly Met	10 Ser Val Ser	Ser Leu Leu	Lys Thr Gly 60	Gln Leu 45 Thr	Lys 30 Phe Ile	15 Arg Arg Met	Lys Tyr Ala
	40128 40129 40131 40132 40133 40135 40138 40138 40139 40141	<21: <21: <400 Met 1 Ala Lys Ser	2> TY 3> OI 0> SI Asp Glu Thr Asp 50	YPE: RGAN: EQUE Leu Gly Lys 35 Trp	PRT ISM: NCE: Glu Asp 20 Thr	Homo 304 Ala 5 Phe Val	Ala Glu Lys Lys	Lys Leu Met Leu 55	Asn Gly Ile 40 Phe	Ile 25 Gly Met	10 Ser Val Ser	Ser Leu Leu	Lys Thr Gly 60	Gln Leu 45 Thr	Lys 30 Phe Ile	15 Arg Arg Met	Lys Tyr Ala
	40128 40129 40131 40132 40133 40135 40136 40138 40139 40141 40142 40144	<21: <21: <400 Met 1 Ala Lys Ser Ile 65	2> TY 3> OI 0> SI Asp Glu Thr Asp 50	YPE: RGAN: EQUE Leu Gly Lys 35 Trp	PRT ISM: NCE: Glu Asp 20 Thr Gln	Homo 304 Ala 5 Phe Val Asp	Ala Glu Lys Lys Gly 70	Lys Leu Met Leu 55 Leu	Asn Gly Ile 40 Phe	Ile 25 Gly Met Leu	10 Ser Val Ser Met	Ser Leu Leu Met 75	Lys Thr Gly 60 Ile	Gln Leu 45 Thr	Lys 30 Phe Ile Phe	15 Arg Arg Met	Lys Tyr Ala Glu 80
	40128 40129 40131 40132 40133 40135 40136 40138 40139 40141 40142 40144 40145 40147	<21: <400 Met 1 Ala Lys Ser Ile 65 Met	2> TY 3> OI 0> SI Asp Glu Thr Asp 50 Ala	YPE: RGAN: EQUED Leu Gly Lys 35 Trp His	PRT ISM: NCE: Glu Asp 20 Thr Gln Gly Lys	Homo 304 Ala 5 Phe Val Asp Ser Phe 85	Ala Glu Lys Lys Gly 70 Val	Lys Leu Met Leu 55 Leu Asp	Asn Gly Ile 40 Phe Pro	Ile 25 Gly Met Leu Ala	10 Ser Val Ser Met Gly 90	Ser Leu Leu Met 75 Asn	Lys Thr Gly 60 Ile	Gln Leu 45 Thr Val Ser	Lys 30 Phe Ile Phe	15 Arg Arg Met Gly Pro 95	Lys Tyr Ala Glu 80 Val
	40128 40129 40131 40132 40133 40135 40136 40138 40139 40141 40142 40144 40145 40147	<21: <400 Met 1 Ala Lys Ser Ile 65 Met	2> TY 3> OI 0> SI Asp Glu Thr Asp 50 Ala	YPE: RGAN: EQUED Leu Gly Lys 35 Trp His	PRT ISM: NCE: Glu Asp 20 Thr Gln Gly Lys	Homo 304 Ala 5 Phe Val Asp Ser Phe 85	Ala Glu Lys Lys Gly 70 Val	Lys Leu Met Leu 55 Leu Asp	Asn Gly Ile 40 Phe Pro	Ile 25 Gly Met Leu Ala	10 Ser Val Ser Met Gly 90	Ser Leu Leu Met 75 Asn	Lys Thr Gly 60 Ile	Gln Leu 45 Thr Val Ser	Lys 30 Phe Ile Phe	15 Arg Arg Met Gly Pro 95	Lys Tyr Ala Glu 80 Val
	40128 40129 40131 40132 40135 40136 40138 40141 40142 40144 40145 40147 40148 40150 40151	<21: <400 Met 1 Ala Lys Ser Ile 65 Met Asn	2> TY 3> OI 0> SI Asp Glu Thr Asp 50 Ala Thr	YPE: RGAN: EQUED Leu Gly Lys 35 Trp His Asp	PRT ISM: NCE: Glu Asp 20 Thr Gln Gly Lys Leu 100	Homo 304 Ala 5 Phe Val Asp Ser Phe 85 Ser	Ala Glu Lys Lys Gly 70 Val Leu	Lys Leu Met Leu 55 Leu Asp	Asn Gly Ile 40 Phe Pro Thr	Ile 25 Gly Met Leu Ala Pro 105	10 Ser Val Ser Met Gly 90 Gly	Ser Leu Leu Met 75 Asn Lys	Lys Thr Gly 60 Ile Phe Ile	Gln Leu 45 Thr Val Ser Leu	Lys 30 Phe Ile Phe Glu 110	Arg Arg Met Gly Pro 95 Glu	Lys Tyr Ala Glu 80 Val Glu
	40128 40129 40131 40132 40133 40135 40136 40138 40141 40142 40144 40145 40147 40148 40150 40151 40153	<21: <400 Met 1 Ala Lys Ser Ile 65 Met Asn	2> TY 3> OI 0> SI Asp Glu Thr Asp 50 Ala Thr	YPE: RGAN: RGAN: Leu Gly Lys 35 Trp His Asp Ser	PRT ISM: NCE: Glu Asp 20 Thr Gln Gly Lys Leu 100 Tyr	Homo 304 Ala 5 Phe Val Asp Ser Phe 85 Ser	Ala Glu Lys Lys Gly 70 Val Leu	Lys Leu Met Leu 55 Leu Asp	Asn Gly Ile 40 Phe Pro Thr Asn	Ile 25 Gly Met Leu Ala Pro 105	10 Ser Val Ser Met Gly 90 Gly	Ser Leu Leu Met 75 Asn Lys	Lys Thr Gly 60 Ile Phe Ile	Gln Leu 45 Thr Val Ser Leu Ala	Lys 30 Phe Ile Phe Glu 110	Arg Arg Met Gly Pro 95 Glu	Lys Tyr Ala Glu 80 Val Glu
	40128 40129 40131 40132 40133 40135 40136 40138 40141 40142 40144 40145 40147 40148 40150 40151 40153 40153	<21: <400 Met 1 Ala Lys Ser Ile 65 Met Asn Met	2> TY 3> OI 0> SI Asp Glu Thr Asp 50 Ala Thr Phe	YPE: RGANI RGANI EQUE Leu Gly Lys 35 Trp His Asp Ser Arg 115	PRT ISM: NCE: Glu Asp 20 Thr Gln Gly Lys Leu 100 Tyr	Homo 304 Ala 5 Phe Val Asp Ser Phe 85 Ser	Ala Glu Lys Lys Gly 70 Val Leu Tyr	Lys Leu Met Leu 55 Leu Asp Leu Tyr	Asn Gly Ile 40 Phe Pro Thr Asn Tyr 120	Ile 25 Gly Met Leu Ala Pro 105 Ser	10 Ser Val Ser Met Gly 90 Gly	Ser Leu Leu Met 75 Asn Lys Leu	Lys Thr Gly 60 Ile Phe Ile Gly	Gln Leu 45 Thr Val Ser Leu Ala 125	Lys 30 Phe Ile Phe Phe Glu 110 Gly	Arg Arg Met Gly Pro 95 Glu Val	Lys Tyr Ala Glu 80 Val Glu Leu
	40128 40129 40131 40132 40133 40135 40136 40138 40139 40141 40145 40147 40145 40147 40145 40150 40151 40153 40156	<21: <400 Met 1 Ala Lys Ser Ile 65 Met Asn Met	2> TY 3> OI 0> SI Asp Glu Thr Asp 50 Ala Thr Phe Thr	YPE: RGANI RGANI EQUE Leu Gly Lys 35 Trp His Asp Ser Arg 115	PRT ISM: NCE: Glu Asp 20 Thr Gln Gly Lys Leu 100 Tyr	Homo 304 Ala 5 Phe Val Asp Ser Phe 85 Ser	Ala Glu Lys Lys Gly 70 Val Leu Tyr	Lys Leu Met Leu 55 Leu Asp Leu Tyr	Asn Gly Ile 40 Phe Pro Thr Asn Tyr 120	Ile 25 Gly Met Leu Ala Pro 105 Ser	10 Ser Val Ser Met Gly 90 Gly	Ser Leu Leu Met 75 Asn Lys Leu	Lys Thr Gly 60 Ile Phe Ile Gly Leu	Gln Leu 45 Thr Val Ser Leu Ala 125	Lys 30 Phe Ile Phe Phe Glu 110 Gly	Arg Arg Met Gly Pro 95 Glu Val	Lys Tyr Ala Glu 80 Val Glu Leu
	40128 40129 40131 40132 40133 40135 40136 40138 40139 40141 40145 40147 40145 40147 40150 40151 40153 40154 40156 40157	<21: <400 Met 1 Ala Lys Ser Ile 65 Met Asn Met Val	2> TY 3> OI 0> SI Asp Glu Thr Asp 50 Ala Thr Phe Thr	YPE: RGAN: EQUED Leu Gly Lys 35 Trp His Asp Ser Arg 115 Ala	PRT ISM: NCE: Glu Asp 20 Thr Gln Gly Lys Leu 100 Tyr	Homo 304 Ala 5 Phe Val Asp Ser Phe 85 Ser Ala	Ala Glu Lys Lys Gly 70 Val Leu Tyr Gln	Lys Leu Met Leu 55 Leu Asp Leu Tyr Val 135	Asn Gly Ile 40 Phe Pro Thr Asn Tyr 120 Ser	Ile 25 Gly Met Leu Ala Pro 105 Ser	10 Ser Val Ser Met Gly 90 Gly Gly Trp	Ser Leu Leu Met 75 Asn Lys Leu Thr	Lys Thr Gly 60 Ile Phe Ile Gly Leu 140	Gln Leu 45 Thr Val Ser Leu Ala 125 Ala	Lys 30 Phe Ile Phe Glu 110 Gly	Arg Arg Met Gly Pro 95 Glu Val Gly	Lys Tyr Ala Glu 80 Val Glu Leu Arg
	40128 40129 40131 40132 40133 40135 40136 40138 40141 40142 40144 40145 40147 40148 40150 40151 40153 40154 40157 40157	<21: <21: <400 Met 1 Ala Lys Ser Ile 65 Met Asn Met Val Gln	2> TY 3> OI 0> SI Asp Glu Thr Asp 50 Ala Thr Phe Thr	YPE: RGAN: EQUED Leu Gly Lys 35 Trp His Asp Ser Arg 115 Ala	PRT ISM: NCE: Glu Asp 20 Thr Gln Gly Lys Leu 100 Tyr	Homo 304 Ala 5 Phe Val Asp Ser Phe 85 Ser Ala	Ala Glu Lys Lys Gly 70 Val Leu Tyr Gln Arg	Lys Leu Met Leu 55 Leu Asp Leu Tyr Val 135	Asn Gly Ile 40 Phe Pro Thr Asn Tyr 120 Ser	Ile 25 Gly Met Leu Ala Pro 105 Ser	10 Ser Val Ser Met Gly 90 Gly Gly Trp	Ser Leu Leu Met 75 Asn Lys Leu Thr	Lys Thr Gly 60 Ile Phe Ile Gly Leu 140	Gln Leu 45 Thr Val Ser Leu Ala 125 Ala	Lys 30 Phe Ile Phe Glu 110 Gly	Arg Arg Met Gly Pro 95 Glu Val Gly	Lys Tyr Ala Glu 80 Val Glu Leu Arg
	40128 40129 40131 40132 40133 40135 40136 40138 40139 40141 40145 40147 40145 40147 40150 40151 40153 40154 40156 40157	<21: <400 Met 1 Ala Lys Ser Ile 65 Met Asn Met Val Gln 145	2> TY 3> OI 0> SI Asp Glu Thr Asp 50 Ala Thr Phe Thr Ala 130 Ile	YPE: RGAN: EQUED Leu Gly Lys 35 Trp His Asp Ser Arg 115 Ala	PRT ISM: NCE: Glu Asp 20 Thr Gln Gly Lys Leu 100 Tyr Tyr	Homo 304 Ala 5 Phe Val Asp Ser Phe 85 Ser Ala Ile	Ala Glu Lys Lys Gly 70 Val Leu Tyr Gln Arg 150	Lys Leu Met Leu 55 Leu Asp Leu Tyr Val 135 Gln	Asn Gly Ile 40 Phe Pro Thr Asn Tyr 120 Ser Lys	Ile 25 Gly Met Leu Ala Pro 105 Ser Phe	10 Ser Val Ser Met Gly 90 Gly Trp Phe	Ser Leu Leu Met 75 Asn Lys Leu Thr His	Lys Thr Gly 60 Ile Phe Ile Gly Leu 140 Ala	Gln Leu 45 Thr Val Ser Leu Ala 125 Ala Ile	Lys 30 Phe Ile Phe Glu 110 Gly Ala Leu	Arg Arg Met Gly Pro 95 Glu Val Gly Arg	Lys Tyr Ala Glu 80 Val Glu Leu Arg Gln 160

Input Set : N:\EBONY'S\EP.txt

	40310						950					955					960
	40312	Ser	His	Ala	Phe		Tyr	Phe	Ala	Tyr	Ala	Ala	Gly	Phe	Arg	Phe	Gly
	40313					965					970					975	
	40315	Ala	Tyr	Leu	Ile	Gln	Ala	Gly	Arg	Met	Ser	Asn	Ala	Leu	Ser	Phe	Asp
	40316				980					985					990		
	40318	Arg	Val	Phe	Thr	Ala	Ile	Ala	Tyr	Gly	Ala	Met	Ala	Ile	Gly	Glu	Thr
E>	40319			995					000					005			
	40321	Leu	Val	Leu	Ala	Pro	Glu	Tyr	Ser	Lys	Ala	Lys	Ser	Gly	Ala	Ala	His
E>	40322		010					015					020				
	40324	Leu	Phe	Ala	Leu	Leu	Glu	Lys	Lys	Pro	Asn	Ile	Asp	Ser	Arg	Ser	Gln
E>	40325						030					035	_		_		040
	40327	Glu	Gly	Lys	Lys	Pro	Leu	Ser	Gln	Asp	Thr	Cys	Glu	Gly	Asn	Leu	Glu
E>	40328		-	-	-	045				-	050	-		-		055	
	40330	Phe	Arq	Glu	Val	Ser	Phe	Phe	Tyr	Pro	Cvs	Arq	Pro	Asp	Val	Phe	Ile
E>	40331				060				_	065	1	,			070		
	40333	Leu	Arq	Glv		Ser	Leu	Ser	Ile		Ara	Glv	Lvs	Thr		Ala	Phe
E>	40334			075					080		5	1	-1-	085			
	40336	Val	Glv		Ser	Glv	Cvs	Glv		Ser	Thr	Ser	Va l		Leu	Leu	Gln
E>	40337		090				4 -	095	<u>1</u>				100				
	40339	Arq	Leu	Tyr	Asp	Pro	Val	Gln	Glv	Gln	Gln	Leu	Phe	Asp	Glv	Val	Asp
E>	40340			-1-			110		1			115			1		120
_	40342		Lvs	Glu	Leu	Asn		Gln	Trp	Leu	Ara		Gln	Tle	Ala	Tle	
E>	40343					125					130					135	
	40345	Pro	Gln	Glu	Pro		Leu	Phe	Asn	Cvs		Ile	Ala	Glu	Asn		Ala
E>	40346				140					145					150		
	40348	Tvr	Glv	Asp		Ser	Ara	Val	Val		Leu	Asp	Glu	Ile		Glu	Ala
E>	40349	- 1 -	1	155			5		160			<u>-</u> -		165	-1-		
	40351	Ala	Asn		Ala	Asn	Ile	His		Phe	Ile	Glu	Glv		Pro	Lvs	Tvr
E>	40352		170					175					180			1-	-1-
	40354	Asn		Gln	Val	Glv	Leu		Glv	Ala	Gln	Leu		Glv	Glv	Gln	Lvs
E>	40355					1	190		1			195		1	1		200
	40357		Ara	Leu	Ala	Ile		Ara	Ala	Leu	Leu		Lvs	Pro	Lvs	Ile	
E>	40358		,			205		5			210		-1-		-1-	215	
	40360	Leu	Leu	Asp	Glu	Ala	Thr	Ser	Ala	Leu		Asn	Asp	Ser	Glu		Val
E>	40361			_	220					225					230	-1-	
	40363	Gln	Val	Va1		His	Ala	Leu	Asp		Ala	Ara	Thr	Glv		Thr	Cvs
E>	40364			235					240	-1-		9		245	5		010
	40366	Leu	Val		Thr	His	Ara	Leu		Ala	Ile	Gln	Asn	Ala	Asp	Leu	Tle
E>	40367		250				5	255					260				
_	40369	Val		Leu	His	Asn	Glv		Tle	Lvs	Glu	Gln		Thr	His	Gln	Glu
E>	40370						270	-1-		-1-		275	1				280
	40372		Leu	Ara	Asn	Arσ		Tle	Tvr	Phe	Lvs		Va 1	Asn	Δla	Gln	
E>	40373		204	5		285			-1-		290	Lou	, 41			295	DCI
	40375	Ala	Ser	Lvs	G] v		Thr	Thr	Tle	Va 1		Ala	His	Ara	Len		Thr
E>	40376			-1-	300	9				305	, 41			9	310	201	
_ •	40378	Tle	Arσ	Ser		Asp	Len	Tle	Va 1		Len	Lvs	Asn	Glv		Leu	Ala
E>	40379		9	315					320		u	~, 5	-101	325	-100	LCu	
	40381	Glu	Lvs		Ala	His	Ala	Glu		Met	Ala	Lvs	Ara		Leu	Tvr	Tvr
E>	40382	u	330	1				335	u			2,5	340	- Y	2-Cu	-1-	~ I *
								555					240				

Input Set : N:\EBONY'S\EP.txt

Output Set: N:\CRF4\11012002\J092900.raw

40384 Ser Leu Val Met Ser Gln Val Met Leu Met E--> 40385 345 350 45271 <210> SEQ ID NO: 348 45272 <211> LENGTH: 1033 45273 <212> TYPE: PRT 45274 <213> ORGANISM: Homo sapiens 45276 <400> SEQUENCE: 348 45277 Met Gly Pro Pro Phe Ser Thr Arg Glu Thr Ser Thr Leu Cys Glu Pro 45278 1 5 45280 Lys Gly Arg Arg Leu Arg Pro Arg Gln Arg Arg Asn Gln Glu Asn Val 45283 Thr Lys Asn Ser Leu Lys Leu Pro Gly Pro Leu Gln Glu Gln Thr Gly 45284 35 45286 Leu Gly Pro Pro His Leu Gly Ser Glu Leu Gly Leu His Gly Gly Asp 45289 Thr Trp Asp Tyr Lys Ser His Val Met Thr Lys Phe Ala Glu Glu Glu 45290 65 70 45292 Asp Val Arg Arg Ser Phe Glu Asn Thr Ala Ala Asp Trp Pro Glu Met 85 90 45295 Gln Thr Leu Ala Gly Ala Phe Asp Ser Asp Arg Trp Gly Phe Arg Pro 100 105 45298 Arg Thr Val Val Leu His Gly Lys Ser Gly Ile Gly Lys Ser Ala Leu 120 125 45301 Ala Arg Arg Ile Val Leu Cys Trp Ala Gln Gly Gly Leu Tyr Gln Gly 45302 130 135 140 45304 Met Phe Ser Tyr Val Phe Phe Leu Pro Val Arg Glu Met Gln Arg Lys 45305 145 150 155 45307 Lys Glu Ser Ser Val Thr Glu Phe Ile Ser Arg Glu Trp Pro Asp Ser 165 170 45310 Gln Ala Pro Val Thr Glu Ile Met Ser Arg Pro Glu Arg Leu Leu Phe 180 185 45313 Ile Ile Asp Gly Phe Asp Asp Leu Gly Ser Val Leu Asn Asn Asp Thr 195 200 45316 Lys Leu Cys Lys Asp Trp Ala Glu Lys Gln Pro Pro Phe Thr Leu Ile 215 220 45319 Arg Ser Leu Leu Arg Lys Val Leu Leu Pro Glu Ser Phe Leu Ile Val 235 45320 225 230 45322 Thr Val Arg Asp Val Gly Thr Glu Lys Leu Lys Ser Glu Val Val Ser 245 250 45325 Pro Arg Tyr Leu Leu Val Arg Gly Ile Ser Gly Glu Gln Arg Ile His 260 265 45328 Leu Leu Glu Arg Gly Ile Gly Glu His Gln Lys Thr Gln Gly Leu 45329 280 45331 Arg Ala Ile Met Asn Asn Arg Glu Leu Leu Asp Gln Cys Gln Val Pro 295 45334 Ala Val Gly Ser Leu Ile Cys Val Ala Leu Gln Leu Gln Asp Val Val 310 315 45337 Gly Glu Ser Val Ala Pro Phe Asn Gln Thr Leu Thr Gly Leu His Ala 45338 330 325

Input Set : N:\EBONY'S\EP.txt

```
730
     45415 Asn Lys Val Thr Asp Gln Gly Val Met Pro Leu Ser Asp Ala Leu Arg
                       740
                                          745
     45418 Val Ser Gln Cys Ala Leu Gln Lys Leu Ile Leu Glu Asp Cys Gly Ile
           755
                                      760
     45421 Thr Ala Thr Gly Cys Gln Ser Leu Ala Ser Ala Leu Val Ser Asn Arg
                                   775
     45424 Ser Leu Thr His Leu Cys Leu Ser Asn Asn Ser Leu Gly Asn Glu Gly
                               790
                                                   795
     45427 Val Asn Leu Leu Cys Arg Ser Met Arg Leu Pro His Cys Ser Leu Gln
     45428
                           805
                                               810
     45430 Arg Leu Met Leu Asn Gln Cys His Leu Asp Thr Ala Gly Cys Gly Phe
                                           825
     45433 Leu Ala Leu Ala Leu Met Gly Asn Ser Trp Leu Thr His Leu Ser Leu
                   835
                                       840
     45436 Ser Met Asn Pro Val Glu Asp Asn Gly Val Lys Leu Leu Cys Glu Val
                                   855
                                                       860
     45439 Met Arg Glu Pro Ser Cys His Leu Gln Asp Leu Glu Leu Val Lys Cys
     45440 865
                               870
                                                   875
     45442 His Leu Thr Ala Ala Cys Cys Glu Ser Leu Ser Cys Val Ile Ser Arg
                          885
                                               890
     45445 Ser Arg His Leu Lys Ser Leu Asp Leu Thr Asp Asn Ala Leu Gly Asp
                       900
                                           905
     45448 Gly Gly Val Ala Ala Leu Cys Glu Gly Leu Lys Gln Lys Asn Ser Val
                                       920
     45451 Leu Thr Arg Leu Gly Leu Lys Ala Cys Gly Leu Thr Ser Asp Cys Cys
     45452
                                   935
                                                       940
     45454 Glu Ala Leu Ser Leu Ala Leu Ser Cys Asn Arg His Leu Thr Ser Leu
     45455 945
                               950
                                                   955
     45457 Asn Leu Val Gln Asn Asn Phe Ser Pro Lys Gly Met Met Lys Leu Cys
                           965
                                               970
     45460 Ser Ala Phe Ala Cys Pro Thr Ser Asn Leu Gln Ile Ile Gly Leu Trp
     45461
                      980
                                           985
                                                               990
     45463 Lys Trp Gln Tyr Pro Val Gln Ile Arg Lys Leu Leu Glu Glu Val Gln
E--> 45464
           995
                                       000
     45466 Leu Leu Lys Pro Arg Val Val Ile Asp Gly Ser Trp His Ser Phe Asp
E--> 45467
                                  015
                                                       020
     45469 Glu Asp Asp Arg Tyr Trp Trp Lys Asn
E--> 45470 025
     52052 <210> SEQ ID NO: 768
     52053 <211> LENGTH: 22
     52055 <212> TYPE: DNA
     52056 <213> ORGANISM: Artificial Sequence
     52058 <220> FEATURE:
W--> 52059 <221> NAME/KEY: Description of Artificial Sequence: Reverse Primer J below M ZZ3
W--> 52061 <223> OTHER INFORMATION:
W--> 52061 <400>768
     52062 cagagettea cgaagttett et
                                                                              22
E--> 52066 (875) -delete
```

RAW SEQUENCE LISTING

DATE: 11/01/2002

PATENT APPLICATION: US/10/092,900

TIME: 12:24:32

Input Set : N:\EBONY'S\EP.txt

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/092,900

DATE: 11/01/2002 TIME: 12:24:33

Input Set : N:\EBONY'S\EP.txt

Output Set: N:\CRF4\11012002\J092900.raw

Use of <220> Feature(NEW RULES):

Sequence(s)_are missing the <220> Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104,pp.29631-32) (Sec.1.823 of new Rules)

Seq#:357,358,359,360,361,362,363,364,365,366,367,368,369,370,371,372,373,374 Seq#:375,376,377,378,379,380,381,382,383,384,385,386,387,388,389,390,391,392 Seq#:393,394,395,396,397,398,399,400,401,402,403,404,405,406,407,408,409,410 Seq#:411,412,413,414,415,416,417,418,419,420,421,422,423,424,425,426,427,428 Seq#:429,430,431,432,433,434,435,436,437,438,439,440,441,442,443,444,445,446 Seq#:447,448,449,450,451,452,453,454,455,456,457,458,459,460,461,462,463,464 $\mathtt{Seq\#:465,466,467,468,469,470,471,472,473,474,475,476,477,478,479,480,481,482}$ Seq#:483,484,485,486,487,488,489,490,491,492,493,494,495,496,497,498,499,500 Seq#:501,502,503,504,505,506,507,508,509,510,511,512,513,514,515,516,517,518 Seq#:537,538,539,540,541,542,543,544,545,546,547,548,549,550,551,552,553,554 Seq#:555,556,557,558,559,560,561,562,563,564,565,566,567,568,569,570,571,572 Seq#:573,574,575,576,577,578,579,580,581,582,583,584,585,586,587,588,589,590 Seq#:591,592,593,594,595,596,597,598,599,600,601,602,603,604,605,606,607,608 Seq#:609,610,611,612,613,614,615,616,617,618,619,620,621,622,623,624,625,626 Seq#:627,628,629,630,631,632,633,634,635,636,637,638,639,640,641,642,643,644 Seq#:645,646,647,648,649,650,651,652,653,654,655,656,657,658,659,660,661,662 Seq#:663,664,665,666,667,668,669,670,671,672,673,674,675,676,677,678,679,680 Seq#:681,682,683,684,685,686,687,688,689,690,691,692,693,694,695,696,697,698 Seq#:699,700,701,702,703,704,705,706,707,708,709,710,711,712,713,714,715,716 Seq#:717,718,719,720,721,722,723,724,725,726,727,728,729,730,731,732,733,734 Seq#:735,736,737,738,739,740,741,742,743,744,745,746,747,748,749,750,751,752 Seq#:753,754,755,756,757,758,759,760,761,762,763,764,765,766,767,768